

EXHIBIT 1

Trials@uspto.gov
571-272-7822

Paper 9
Entered: November 21, 2023

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MASIMO CORPORATION,
Petitioner,

v.

APPLE INC.,
Patent Owner.

IPR2023-00831
Patent D735,131 S

Before KEN B. BARRETT, SCOTT A. DANIELS, and
ROBERT L. KINDER, *Administrative Patent Judges*.

DANIELS, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

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I. INTRODUCTION

Masimo Corporation (“Masimo” or “Petitioner”) filed a Petition requesting *inter partes* review of the sole claim of U.S. Patent No. D735,131 S (Ex. 1001, “the ‘131 patent”). Paper 2 (“Pet.”). Apple Inc., (“Apple” or “Patent Owner”) filed a Preliminary Response to the Petition. Paper 8 (“Prelim. Resp.”).

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Upon consideration of the arguments and evidence presented by Petitioner and Patent Owner, we are not persuaded that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing the unpatentability of the challenged claim. *See* 35 U.S.C. § 314(a). Accordingly, we do not institute an *inter partes* review of the challenged claim.

A. *Real Parties in Interest*

Petitioner states that it is the real party in interest. Pet. 3. Patent Owner states that it is the real party in interest. Paper 3.

B. *Related Matters*

The parties indicate that the ‘131 patent has been asserted against the defendant in *Apple Inc. v. Masimo Corporation and Sound United, LLC*, Case No. 1:22-cv-01377, in the U.S. District Court for the District of Delaware. Pet. 3; Paper 3.

C. *The ‘131 Patent (Ex. 1001)*

Petitioner challenges the design claim in the ‘131 patent issued July 28, 2015 from an application filed August 11, 2014. Titled “Charger,” the claim recites “[t]he ornamental design for a charger, as shown and

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described.” Ex. 1001, Code (54), (57), Figs. 1–11. Selected drawings illustrating the claim for the ornamental design for the charger are reproduced below:

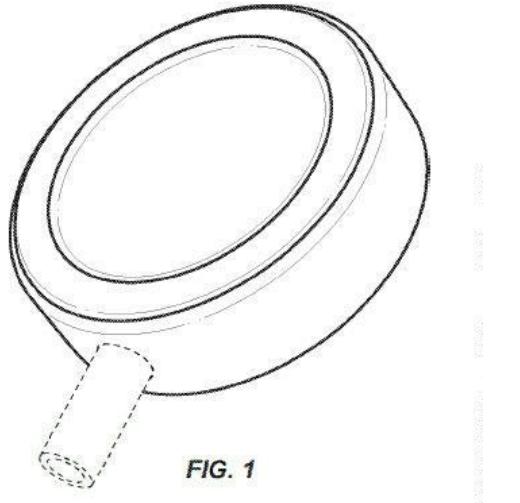


Figure 1 is a “bottom front perspective view of a charger.” *Id.* at Description. *Id.*

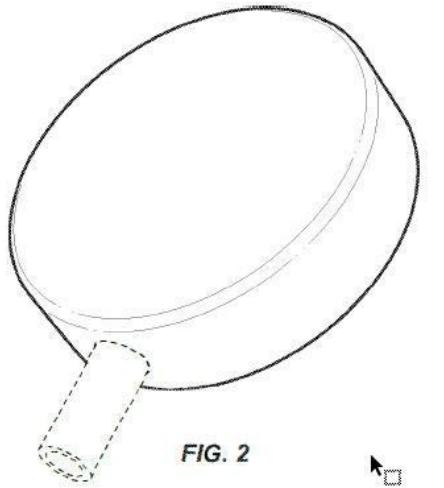


Figure 2 is “a bottom rear perspective view” of the claimed charger. *Id.*

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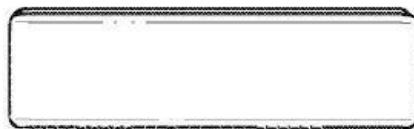


FIG. 7



FIG. 8

Figures 7 and 8 are top and bottom elevation views, respectively, of the claimed charger. *Id.*

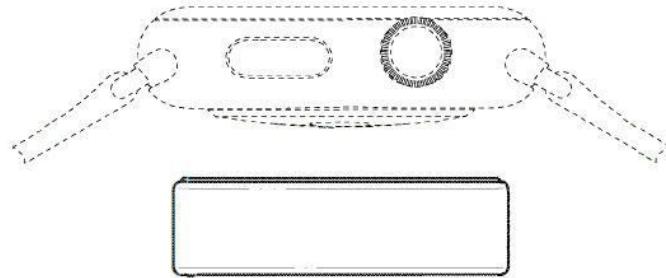


FIG. 10

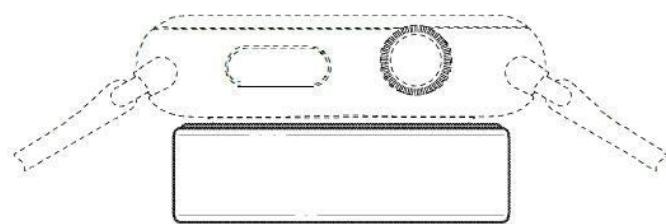


FIG. 11

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Figures 10 and 11 are described as “perspective view[s] thereof showing the charger in another environment in which it may be used,” for example with a device such as a watch, illustrated by broken lines. *Id.*

Certain figures illustrate a cord connector in the bottom sidewall of the charger in dashed or broken lines. *Id.* The '131 patent describes that “[t]he broken lines in the Figures show portions of the charger and environment that form no part of the claimed design.” *Id.* The '131 patent further describes that “[t]he shade lines in the Figures show contour and not surface ornamentation.” *Id.*

D. Prior Art and Asserted Grounds

Petitioner asserts that the claim would have been unpatentable on the following grounds:¹

Ground	Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1	1	103 ²	Lee ³
2	1	103	Lee, Chiang ⁴
3	1	103	CN-470 ⁵
4	1	103	CN-470, Chiang
5	1	103	Murray ⁶

¹ Petitioner supports its challenge with a Declaration by Mr. Joel Delman. (Ex. 1003), and Patent Owner relies upon a Declaration by Professor Lance Gordon Rake (Ex. 2001). *See infra.*

² The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), amended 35 U.S.C. §§ 102 and 103, effective March 16, 2013. Given that the application from which the '131 patent issued was filed after this date, the current version of § 103 applies.

³ Ex. 1006, UK Registered Design No. 4032616 (reg. date Nov. 2, 2013)

⁴ Ex. 1009, U.S. Design Patent No. 720,289 S (iss. Dec. 30, 2014).

⁵ Ex. 1007, China Design Patent Application, CN 201330531838, (published July 2, 2014)

⁶ Ex. 1008, U.S. Design Patent No. 718,236 S (iss. Nov. 25, 2014).

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Ground	Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
6	1	103	Murray, Chiang
7	1	103	Chiang

II. ANALYSIS

A. *Obviousness*

In a challenge to a design patent based on obviousness under 35 U.S.C. § 103, the ultimate inquiry is “whether the claimed design would have been obvious to a designer of ordinary skill who designs articles of the type involved.” *Apple, Inc. v. Samsung Elecs. Co.*, 678 F.3d 1314, 1329 (Fed. Cir. 2012) (quoting *Durling v. Spectrum Furniture Co.*, 101 F.3d 100, 103 (Fed. Cir. 1996)). This obviousness inquiry consists of two steps.

Apple, 678 F.3d at 1329. In the first step, a primary reference (sometimes referred to as a “*Rosen* reference”) must be found, “the design characteristics of which are basically the same as the claimed design.” *Id.* (quoting *In re Rosen*, 673 F.2d 388, 391 (CCPA 1982)). This first step is itself a two-part inquiry under which “a court must both ‘(1) discern the correct visual impression created by the patented design as a whole; and (2) determine whether there is a single reference that creates ‘basically the same’ visual impression.’’’ *High Point Design v. Buyers Direct, Inc.*, 730 F.3d 1301, 1311–12 (Fed. Cir. 2013) (quoting *Durling*, 101 F.3d at 103).

In the second step, the primary reference may be modified by secondary references “to create a design that has the same overall visual appearance as the claimed design.” *Id.* at 1311. However, the “secondary references may only be used to modify the primary reference if they are ‘so related [to the primary reference] that the appearance of certain ornamental features in one would suggest the application of those features to the other.’”

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Durling, 101 F.3d at 103 (quoting *In re Borden*, 90 F.3d 1570, 1575 (Fed. Cir. 1996)).

When evaluating prior art references for purposes of determining patentability of ornamental designs, the focus must be on actual appearances and specific design characteristics rather than design concepts. *In re Harvey*, 12 F.3d 1061, 1064 (Fed. Cir. 1993); *see also Apple, Inc.*, 678 F.3d at 1332 (“Rather than looking to the ‘general concept’ of a tablet, the district court should have focused on the distinctive ‘visual appearances’ of the reference and the claimed design.”).

B. The Designer of Ordinary Skill

Petitioner asserts that

a designer of ordinary skill in the art related to the D’131 Patent (“DOSA”) would have had an undergraduate or graduate degree in industrial/product design, along with at least two years of relevant work experience in the field of industrial/product design of portable electronic devices. EX1003 ¶26. A DOSA would not need to be familiar with the electrical engineering, physics, or other advanced technical concepts employed by such devices. *Id.* ¶27. Rather, the DOSA would consult or collaborate with a person of ordinary skill in the art (“POSITA”) regarding concepts outside of the DOSA’s expertise. *Id.* Here, a POSITA would have had at least a Bachelor or Master of Science degree in electrical engineering, or a comparable engineering discipline, in combination with at least two years of related work experience involving portable electronic devices.

Pet. 30–31 (citing Ex. 1014 ¶22).

Patent Owner does not expressly disagree with Petitioner’s assertion, but states that “[a] DOSA would have a degree in Industrial Design or Mechanical Engineering, and at least two years of professional experience

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creating Industrial Designs of consumer products.” Prelim. Resp. 3 (citing Ex. 2001 ¶ 19).

The proffered levels of ordinary skill in the art by the parties are different, but not incompatible. On one hand, Petitioner proffers a person with a degree in industrial/product design who consults with a person of ordinary skill in the art having an electrical engineering, or similar degree. On the other hand, Patent Owner proffers a person having “a degree in Industrial Design or Mechanical Engineering, and at least two years of professional experience creating Industrial Designs of consumer products.” Prelim. Resp. 3.

Considering that this is a design for an electronic “charger,” we find that both parties’ assertions as to the designer of ordinary skill appropriately include engineering and industrial design experience well-suited to a robust understanding of the function and aesthetics of charger devices. And, we do not find it out of the ordinary, as Petitioner contends, that a designer of ordinary skill would have collaborated with other technical professionals in designing such products. We also note that, under the present record, our analysis of this case would be the same under either party’s definition of the designer of ordinary skill in the art.

C. *Claim Construction*

It is well-settled that a design is represented better by an illustration than a description. *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 679 (Fed. Cir. 2008) (citing *Dobson v. Dornan*, 118 U.S. 10, 14 (1886)). Although preferably a design patent claim is not construed by providing a detailed verbal description, it may be “helpful to point out . . . various features of the claimed design as they relate to the . . . prior art.” *Egyptian*

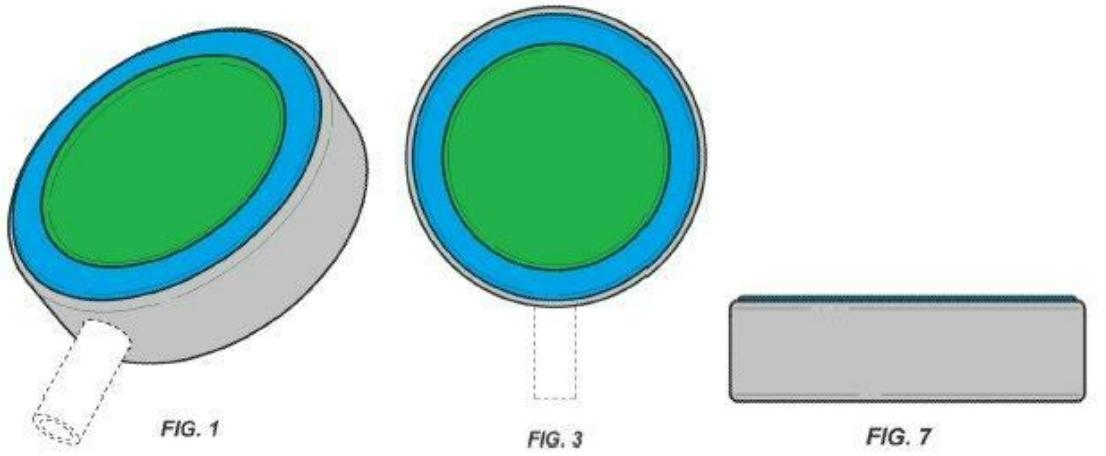
Goddess, 543 F.3d at 679–80; *cf. High Point Design*, 730 F.3d at 1314–15 (remanding to district court, in part, for a “verbal description of the claimed design to evoke a visual image consonant with that design”) (citation omitted).

1. Petitioner’s Claim Construction Arguments

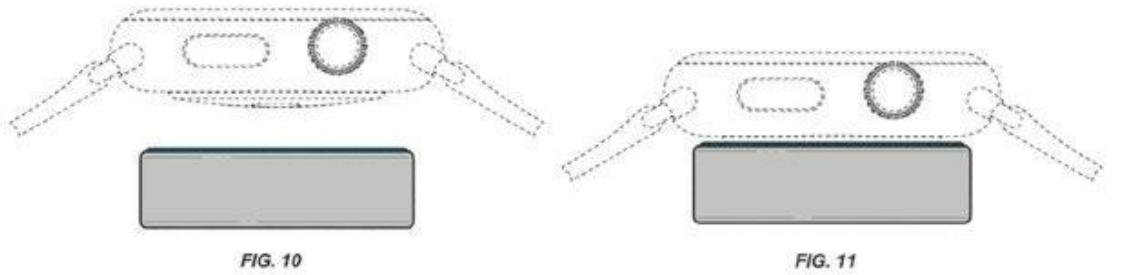
Petitioner argues that the ’131 patent

claims the design of a charger having (1) a cylindrical shape with a flat bottom surface (gray); (2) a short, flat ring (blue) on the cylinder’s top surface that is smaller in diameter than the cylindrical charger; and (3) a recessed center portion (green) that is surrounded by the top surface’s ring.

Pet. 12. Attendant with this description, Petitioner provides the following annotated Figures 1, 3, and 7, reproduced below.



Figures 1, 3, and 7 of the ’131 patent illustrate a bottom perspective view (Fig. 1), a front plane view (Fig. 3), and a top view (Fig. 7), of the claimed charger as annotated by Petitioner. Petitioner points out also that the ’131 patent “demonstrates how the charger is used. Specifically, the charger’s recessed center portion and short, flat ring receive the bottom surface of an Apple Watch and align the Watch with its charger, as shown below.” *Id.* at 13.



Figures 10 and 11 from the '131 patent, as reproduced by Petitioner, illustrate a watch (in dashed lines) being received by the charger. *Id.*

Additionally, Petitioner argues that “[t]he claimed Apple Watch charger design includes numerous design elements that are functional and should thus be ‘factored out’ of the Challenged Claim’s scope.” *Id.* at 14 (citing *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1293–94 (Fed. Cir. 2010); *Campbell Soup Co. v. Gamon Plus, Inc.*, IPR2017-00096, Paper 28, at 7 (PTAB Mar. 30, 2017)). Petitioner makes three specific arguments as to what aspects of the claimed design should be “factored out.” *Id.* at 14–30. First, Petitioner argues that the recessed center portion is functional. *Id.* at 14–24. Second, Petitioner argues that the “flat ring on the charger’s top surface” is functional. *Id.* at 24–26. And, third, that the “overall cylindrical shape with a flat bottom surface and very slightly rounded edges on the top and bottom cylinder edges and the flat ring’s outer edge” is functional. *Id.* at 26–30.

2. Patent Owner’s Claim Construction Arguments

Patent Owner argues that Masimo’s claim construction overlooks important features of the claimed design in favor of a general design concept. Prelim. Resp. 3. According to Patent Owner, Petitioner’s “construction ignores the prominent features of the claimed design—the **circular concave recess** and the **compact puck shape** having proportions

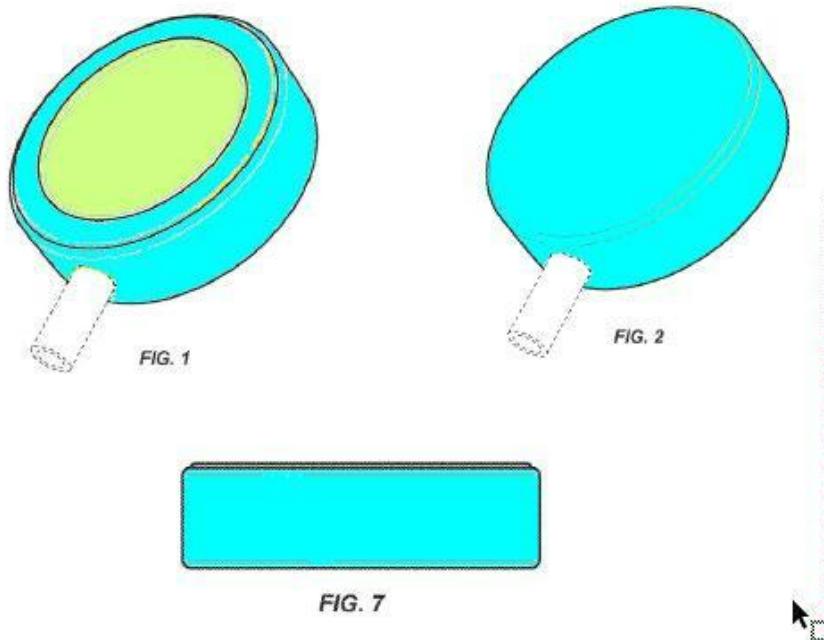
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that have substantially the same width to height ratio as shown in the figures—and other notable features, such as its non-orthogonal transitions and the continuous claimed bottom surface and sidewall.” *Id.* at 3–4. Patent Owner specifically argues that the ’131 patent

claims a unique, elegant design for a “Charger” that has an overall appearance of a compact puck shape having a top face with a circular concave recess that evokes an elegant nest or cradle appearance. EX2001, ¶¶20-24; EX1001, Figs. 1-11. As illustrated below, the claimed design includes an overall cylindrical shape, with a circular shape that is visible in plan and bottom views (blue). EX1001, FIGS. 1, 2, 7. A top major face is dominated by a prominent circular concave recess (green) that is inset relative to a flat ring (blue). *Id.* As shown, the compact puck shape has a distinctive ratio of width (e.g., diameter) to height. The claimed design includes non-orthogonal transitions (e.g., curved or beveled edges) between the major faces and the sidewall (blue). *Id.* Both the claimed sidewall and bottom major face of the design patent are continuous and lack features such as a protrusions, breaks, openings, or recesses.

Id. at 4–5. We reproduce below Patent Owner’s correspondingly annotated versions of Figures 1, 2, and 7.



Figures 1, 2, and 7 of the '131 patent illustrate a bottom front perspective view (Fig. 1), a bottom rear perspective view (Fig. 2), and a top view (Fig. 7), of the claimed charger as annotated by Patent Owner.

Patent Owner disputes Petitioner's argument that functional features must be "factored out" of the claim construction. *Id.* at 11. Patent Owner argues that Petitioner's reliance on *Richardson* is misplaced. *Id.* Patent Owner argues specifically that "[e]ven if particular aspects of the claimed design can have a functional purpose (which Masimo fails to demonstrate), they are still significant to the overall ornamental appearance of the '131 Patent." *Id.* at 11–12. In these circumstances, according to Patent Owner, *Sport Dimension* provides clarity as to how functional aspects of a design claim are to be construed, namely—"that 'in no case did [the Federal Circuit] entirely eliminate a structural element from the claimed ornamental design,' even if the ornamental element also served a functional purpose." *Id.* at 12 (quoting *Sport Dimension, Inc. v. Coleman Co.*, 820 F.3d 1316, 1321 (Fed. Cir. 2016)). To counter Petitioner's assertions of functionality,

Patent Owner argues, *inter alia*, that 1) even functional features contribute to the overall appearance of the claimed design; 2) Petitioner’s analysis improperly focuses on functionality of the commercial embodiment of the claimed design; and 3) there are numerous alternative charger designs. *Id.* at 11–17.

3. *Claim Construction Analysis*

Because it bears on our analysis, we initially address *Richardson* and *Sport Dimension*.

Petitioner argues that in view of *Richardson* certain of the claimed charger design elements are “dictated by function and should thus be ‘factored out’ of the Challenged Claim’s scope.” Pet. 30 (citing *Richardson*, 597 F.3d at 1293–94; *Campbell*, IPR2017-00096, Paper 28 at 14; Ex. 1014 ¶ 55). Petitioner then argues that “[b]roken lines are expressly disclaimed and should also be disregarded.” *Id.* (citing Ex. 1001, Code (57)). The interesting part of these arguments is that Petitioner appears to encourage us to treat claim elements that are at some level functional, the same as indicia shown in broken lines such that the functional elements do not form part of the claimed invention. We do not read *Richardson* or *Campbell* this way, nor, as we discuss below, does *Sport Dimension* adopt such a position where it refers to *Richardson*.

We appreciate that in *Richardson* the Federal Circuit described that the district court “properly *factored out* the functional aspects of Richardson’s design as part of its claim construction.” *Richardson*, 597 F.3d at 1293 (emphasis added). The Federal Circuit, however, further explained “that a design patent, unlike a utility patent, limits protection to the ornamental design of the article.” *Id.* Read in context, we do not understand

Richardson to stand for the proposition that we must literally read out, i.e., “factor out,” entirely, the ornamental features of a claimed design, simply because the features embody a functional aspect of a claimed article of manufacture.

Most, if not all, “articles of manufacture” have a utilitarian or functional purpose. For example, a table is an article of manufacture which may have legs to (functionally) support the table and a flat table top surface for (functionally) supporting some other structure, article, or material. If we were to pursue a literal reading of *Richardson* a table would likely not be patentable as a design. We would factor out the legs, and factor out the table top, including any ornamentation, leaving, well—nothing to patent from a design perspective at least. *See Sport Dimension*, 820 F.3d at 1320 (The Court explaining that “a design patent’s claim protects an article of manufacture, which necessarily serves a utilitarian purpose.”) (internal quotations omitted); *see also Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, 796 F.3d 1312, 1333 (Fed. Cir. 2015) (The Federal Circuit maintaining that “the district court’s construction of the Design Patents to have no scope whatsoever fails to account for the particular ornamentation of the claimed design and departs from our established legal framework for interpreting design patent claims.”).

Indeed, in *Richardson*, the Federal Circuit stated that “Richardson’s multi-function tool comprises several elements that are driven purely by utility . . . such as the handle, the hammerhead, the jaw, and the crowbar are dictated by their functional purpose.” *Richardson*, 597 F.3d at 1294. Yet the Court went on to distinguish the ornamental differences between, for example, Richardson’s handle and hammerhead from the asserted infringing

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Fubar handle. The Federal Circuit explained that even “ignoring the functional elements of the tools, the two designs are indeed different. Each of the Fubar tools has a streamlined visual theme that runs throughout the design including elements such as a tapered hammer-head, a streamlined crow-bar, a triangular neck with rounded surfaces, and a smoothly contoured handle.” *Id.* at 1296. Summarizing its holding, the Court stated that “[i]n a side-by-side comparison with [Richardson’s] patent design, the overall effect of this streamlined theme makes the Fubar tools significantly different from Richardson’s design.” *Id.*

Sport Dimension supports our understanding of *Richardson* and related case law. In *Sport Dimension* the Federal Circuit explained that “[i]n *OddzOn*, *Richardson*, and *Ethicon*, we construed design patent claims so as to assist a finder of fact in distinguishing between functional and ornamental features. But in no case did we entirely eliminate a structural element from the claimed ornamental design, even though that element also served a functional purpose.” *Id.* Similarly, in *Ethicon*, the Federal Circuit explained that “although the Design Patents do not protect the general design concept of an open trigger, torque knob, and activation button in a particular configuration, they nevertheless have some scope—the particular ornamental designs of those underlying elements.” *Ethicon*, 796 F.3d at 1334.

In this proceeding, we will not throw the baby out with the bathwater, that is—we decline to ignore the relevant ornamental characteristics of functional elements of the claimed design. We acknowledge Petitioner’s evidence that the claimed “charger uses the claimed recessed center portion to ensure that the ‘dome’ on the back of the Apple Watch (1) ‘fits snugly in

the [charging] cradle’ and (2) ‘align[s] the watch with the charging hardware components so that the charging can occur in an efficient way.””

Pet. 15 (quoting Ex. 1021, 47:20–23). Petitioner’s evidence includes testimony from Brain Land, an Apple Engineer, who described during an ITC hearing that

[t]he Apple Watch charges wirelessly through a dock that has a complementary shape, and the dome-shape, when in combination with the charging cradle, in addition to providing additional space for the charging coils, it also provides a self-centering mechanism so that, when you place it on the cradle, it aligns itself well to the other -- the charger for efficient wireless charging.

Ex. 1021, 959:21–960:2. Based on such evidence, Petitioner argues that “the recessed center portion depicted in the D’131 Patent is a functional aspect of the claimed design.” Pet. 24 (citing Ex. 1014 ¶ 47). To the extent it is functional, the alignment, or self-centering feature of the charger does not mean that we are to ignore the ornamentality of the front face of the charger including a recessed center portion as illustrated in the claimed design. *See* Pet. 14–24. Similarly, Petitioner argues that “the short, flat ring depicted in the D’131 Patent is a functional aspect of the claimed design.” *Id.* at 26 (citing Ex. 1014 ¶ 50). Again, to the extent the flat ring and recessed center portion facilitates alignment and proper spacing of the protruding back surface of a watch with the charger, we do not discount the ornamentality of the flat ring along with the recessed center portion as part of the overall appearance of the claimed design.

Petitioner argues that the overall cylindrical shape is functional and is “confirmed by the ubiquitous use of cylindrical shapes for prior art chargers.” *Id.* at 26–27 (citing Ex. 1014 ¶ 51). Petitioner asserts that

“[c]hargers commonly used cylindrical power transmission coils, as shown below (green) in the exemplary chargers from Apple’s utility patents.” *Id.* at 27. While it may be that a circular charging coil is readily retained in a cylindrical housing, what the prior art shown in Petitioner’s chart at page 27 of the Petition illustrates is that there are known various cylindrical shaped chargers, each having a different relative appearance. Even if the cylindrical shape is to some extent functional and that charging devices are commonly configured to be cylindrical, this plays to our understanding of the case law discussed above, which is that the overall cylindrical appearance of the claimed design is not to be generally described or given broad scope, but that we should determine the proper scope based on the visual ornamentalism of the cylindrical shape. *See OddzOn Prod., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1405 (Fed. Cir. 1997) (“We agree with the district court’s claim construction, which properly limits the scope of the patent to its overall ornamental visual impression, rather than to the broader general design concept of a rocket-like tossing ball.”).

Petitioner does not argue that the claimed design is primarily functional. *High Point Design LLC v. Buyers Direct, Inc.*, 730 F.3d 1301, 1315 (Fed. Cir. 2013). Petitioner has, in fact, presented evidence that there are multiple alternative designs for chargers that perform the same or similar charging function. *See* Pet. 26–27 (Petitioner arguing that “the functionality of the overall cylindrical circular shape of the claimed design is confirmed by the ubiquitous use of cylindrical shapes for prior art chargers.”); *see also L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993) (“When there are several ways to achieve the function of an article of

manufacture, the design of the article is more likely to serve a primarily ornamental purpose.”).

In this case, a verbal description of the claimed design is helpful to our analysis. Petitioner’s claim construction, particularly as it erroneously calls for certain elements to be “factored out,” is too general, and does not adequately address the overall ornamental visual impression of the claimed charger. *See* Pet. 14–30. With some exceptions, we find Patent Owner’s claim construction the more persuasive and consistent with the appropriate scope and overall ornamentality of the claimed charger. Prelim. Resp. 3–10. Our claim construction, below, is based on, and paraphrased to some extent, from Patent Owner’s proposed construction:

Considering the overall visual impression of the claimed charger as shown in Figures 1–11 of the ’131 patent, the charger has an overall appearance of a compact ice hockey puck shape having a top face with a circular recess that evokes a contemporary appearance. The claimed design includes an overall cylindrical shape, with a circular shape that is visible in plan and bottom views. The top face is dominated by a prominent circular recess that is inset relative to a flat ring having a distinct proportional width relative to the circular recess. The overall cylindrical shape has a distinctive ratio of width (e.g., diameter) to height that, as shown in the figures of the claimed design, evoking the overall appearance of a compact ice hockey puck shape.

The overall cylindrical shape includes non-orthogonal transitional edges (e.g., beveled or curved edges) between the sidewall and the top and bottom faces which contributes to the charger’s overall compact ice hockey puck appearance. The featureless flat bottom surface and sidewall are shown as continuous, unbroken, and uninterrupted by features that distract from the continuity of the design, and also contribute to the charger’s overall compact ice hockey puck appearance.

See Prelim. Resp. 5–10; *see also* Ex. 1001, Figs, 1–11. At least in two regards, our claim construction differs from Patent Owner’s. We cannot discern from the figures that the circular recess as illustrated in the Figures is concave. By way of example, we reproduce Figure 1 below.

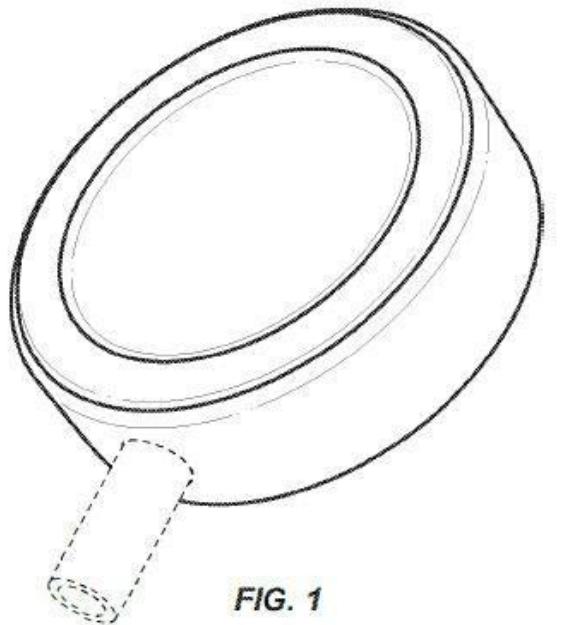


Figure 1, above, is a “bottom front perspective view of a charger.” Pet. Description. *Id.* Figure 1 illustrates a circular line, i.e., a circular inner edge, below the upper edge of the flat ring which, in our view, shows a recess or depression.

What is not clearly illustrated in the ’131 patent figures is that the recessed surface has contours illustrating a concave surface. The specification does describe that “[t]he shade lines in the Figures show contour and not surface ornamentation.” Ex. 1001, Description. However, surface contours illustrating concavity would conventionally be shown by multiple shade lines or stippling, not simply a circular line which appears to be a lower inner corner, or edge, of the flat ring. The Design Patent

Application Guide (“Design Guide”) describes that “[t]he drawing should be provided with appropriate surface shading which shows clearly the character and contour of all surfaces of any three-dimensional aspects of the design.”

Design Patent Application Guide, US Department of Commerce, USPTO, *****.uspto.gov/patents/basics/apply/design-patent (last visited Nov. 9, 2023).

The Design Guide goes on to explain that “[t]he two types of shading commonly employed in design patent application drawings are straight-line surface shading and stippling. Individually or in combination, they can effectively represent the character and contour of most surfaces.”

Id.; *see also* MPEP 1503.02 (“While surface shading is not required under 37 CFR 1.152, it may be necessary in particular cases to shade the figures to show clearly the character and contour of all surfaces of any 3-dimensional aspects of the design.”). The single circumferential line depicting the inner corner, or edge, of the flat ring does not appear necessarily as concave, but we agree that it does define a depression or recess. We appreciate that the commercial embodiment of the claimed charger may show a concave recess, but the conventional surface shading or stippling necessary to effectively show contours indicative of a concave surface in a design patent are not illustrated in any of Figures 1–11 of the ’131 patent. *See* Paper 2, 1 (Comparing Figure 1 of the ’131 patent with what appears to be a commercial embodiment of the Apple watch charger.).

In addition, where we agree with Patent Owner that the cylindrical nature of the charger “has a distinctive ratio of width (e.g., diameter) to height,” we add the visually distinctive characteristic of the “flat ring having a distinct proportional width relative to the circular recess.” Prelim. Resp. 5.

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We also add the descriptive characteristic of an “ice hockey puck” to differentiate the appearance of the claimed design from other puck shapes.

Overall, we agree with Patent Owner’s position that Petitioner’s proposed claim construction is too general and does not adequately address particular important features of the design that contribute to the overall appearance of the claimed design. Prelim. Resp. 3, 10–13, 17–20. As discussed above, Petitioner’s proposed claim construction improperly ignores or “factor[s] out” functional elements and their respective ornamental appearance which is counter to the proper understanding of relevant case law and erroneously omits important visual characteristics that significantly contribute to the overall appearance of the claimed charger. Accordingly, for purposes of the following obviousness analysis we rely on our claim construction as set forth above.

D. Ground 1 – Alleged Obviousness over Lee (Ex. 1006)

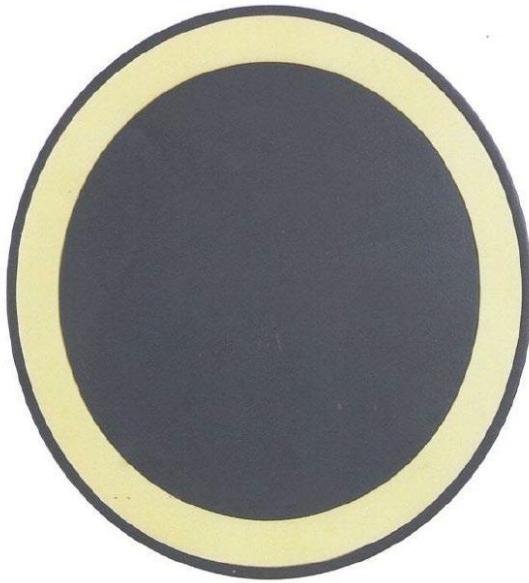
On this record, Petitioner has not established a reasonable likelihood of prevailing on its assertion that the claim would have been obvious over Lee for the reasons explained below.

1. Lee (Ex. 1006)

Lee is a registered design in the United Kingdom, Design no. 4032616 and describes a “[w]ireless mini charging pad mat QI standard charger with anti-slip design & Micro USB port for smart phone.” Ex. 1006, 1. Lee includes four images, 1/1–4/4, of a wireless charger which we reproduce below.



Lee's image 1/4 shows a wireless charger partially revealed with commercial packaging, and advertising a "Wireless Charger."



Lee's image 2/4 is a plan view of a front face of the wireless charger.



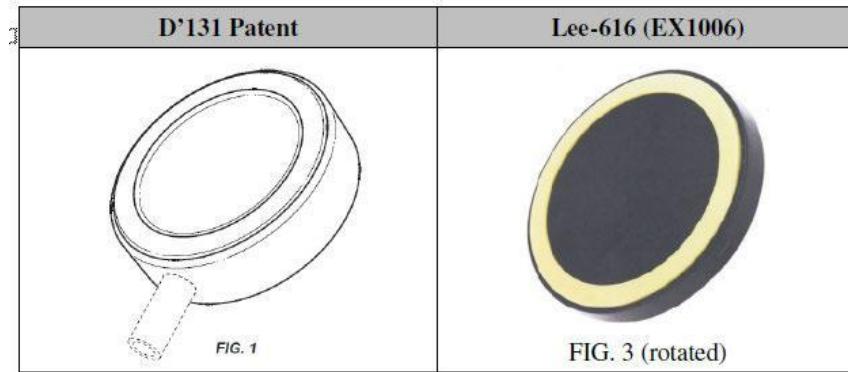
Lee's image 3/4 is a perspective view of the front face and sidewall of the wireless charger.



Lee's image 4/4 is a perspective bottom view of a rear face and sidewall of the wireless charger.

2. Petitioner's Arguments⁷

Petitioner provides the following chart, reproduced below, showing a comparison of Lee's wireless charger with Figures 1, 2, 3, 7, and 8 of the claimed design.



⁷ Commensurate with its “factoring out” arguments, Petitioner broadly argues functionality for certain elements of the claimed design. For example, in Ground 1, Petitioner argues that “[t]he cylindrical shape, flat bottom surface, and rounded edges of the claimed charger should be disregarded as functional elements.” Pet. 41; *see also* Pet. 93 (For Ground 7 Petitioner arguing that “[i]f the functional aspects of the claimed design are factored out, Chiang is a primary reference because it is a single prior art reference with basically the same design characteristics as the non-functional aspects of the claimed design.”) (citing Ex. 1001, Figs. 1–3, 7–8; Ex. 1009, Figs. 1–7; Ex. 1003 ¶¶ 132–145). Because functionality was addressed within our claim construction, we do not address further any issues of functionality generally asserted within Petitioner’s individual grounds.



Petitioner's chart relating to Ground 1 compares side-by-side Figures 1–3, 7, and 8 of the '131 patent with respective images of Lee's wireless charger.

Petitioner argues that "Lee-616 is a primary reference because it is a single prior art reference with basically the same design characteristics as the claimed design." Pet. 39 (citing Ex. 1006, Figs. 2–4; Ex. 1003 ¶¶ 61–72). According to Petitioner, the comparison above "demonstrates that the design characteristics of Lee-616 are basically the same as the claimed design." *Id.* More specifically, Petitioner argues that "Lee-616 and the claimed design have a cylindrical shape with a flat bottom surface and rounded edges that provide the same overall visual impression." *Id.* at 41. Petitioner

acknowledges that “[t]he Lee-616 cylinder has a slightly larger width-to-height ratio than the claimed design, but that difference, or any difference in the dimensions or proportions of the cylindrical shapes of Lee-616 and the claimed design, does not alter the overall visual similarity of these designs.” *Id.* at 43 (citing Ex. 1001, Figs. 1–3; Ex. 1006, Figs. 2–4; Ex. 1003 ¶ 63).

Conceding that “there is a step transition between the sidewall of Lee-616’s cylinder and the bottom surface, and Lee-616’s flat bottom surface also includes a flat ring,” Petitioner argues that “neither difference alters the overall visual similarity between Lee-616 and the claimed design, both of which have overall cylindrical shapes with flat bottom surfaces.” *Id.* at 43–44. Petitioner contends that any differences do not prevent Lee from being used as a primary reference. *Id.* at 44 (citing *MRC Innovations, Inc. v. Hunter Mfg., LLP*, 747 F.3d 1326, 1332–33 (Fed. Cir. 2014)).

3. Patent Owner’s Arguments

Patent Owner argues that Lee is not a proper primary, or *Rosen* reference, where “[t]he ’131 Patent depicts an elegant design with an overall appearance of a compact puck shape having a distinctive **circular concave recess** formed on a top major surface that resembles an elegant nest or cradle.” Prelim. Resp. 20. Patent Owner provides the following annotated comparison of Figure 1 of the ’131 patent and Lee’s Figure 3.

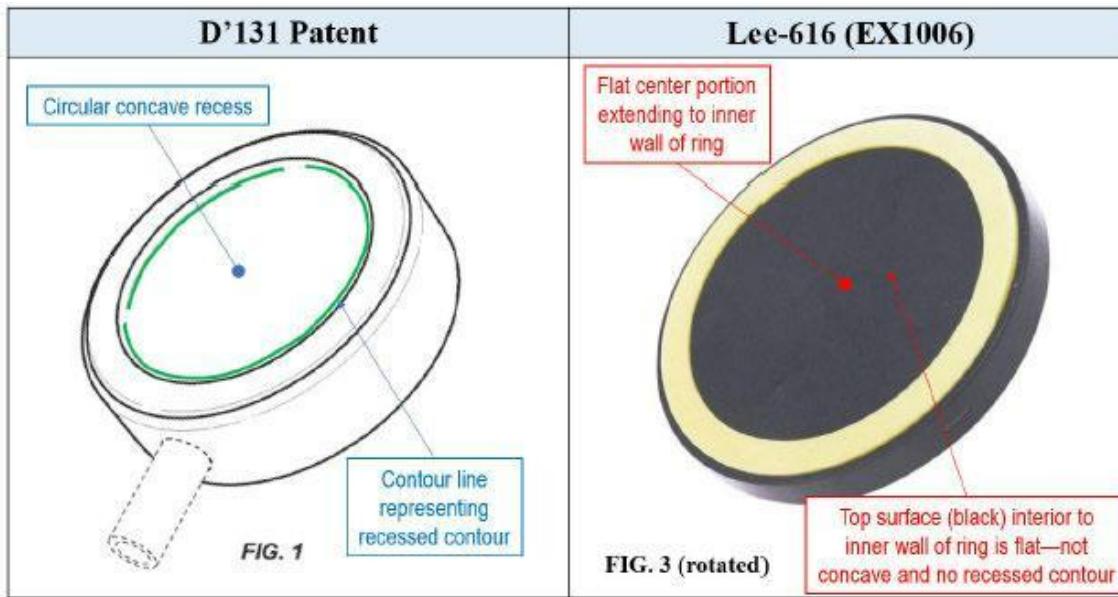


Figure 1 of the '131 patent is shown on the left in comparison with Figure 3 from Lee on the right.

Patent Owner also argues that Petitioner's comparison chart at page 40 of the Petition has fabricated composite side views of Lee's charger. *Id.* at 22 ("Masimo's composite views of Lee-616 appear to be produced from pure speculation about design details that are not depicted in Lee-616's actual drawings") (citing Ex. 1003, nn.2–3). According to Patent Owner, "Lee-616's published drawings are missing critical details, leading to Petitioner's reliance on its impermissible composite views. Apple objects to these fabricated images, and requests that [the] Board not consider them." *Id.* at 23.

Patent Owner makes several other arguments, *inter alia*, that Lee-616's published design "would not have enabled a DOSA to appreciably determine if its overall appearance is 'basically the same as the claimed design.'" *Id.* at 24–25. Also, Petitioner asserts that Petitioner's "composite" figures improperly show a port having dimensions and a metal insert that are

not visible in the Lee figures. *Id.* at 25. Further, according to Patent Owner, “Petitioner’s ‘composite’ assumes an appearance of the protruding rings (yellow) at the top and bottom that are not depicted in Lee-616.” *Id.* at 26.

Patent Owner provides the following two annotated versions of Lee’s figures.

Lee-616



Lee’s Figures 4, left, and Figure 3, right are compared for purposes of assessing the flat rings on the front face and bottom of Lee’s charger. *Id.*

Petitioner’s “composite”



Petitioner’s composite side view shows a profile view of Lee’s charger with Patent Owner’s annotations added. *Id.* at 27. Referencing a recent Board Decision, Patent Owner argues that “Petitioner’s ‘composite’ views thus present an appearance that is simply not discernable from the figures of Lee-616 . . . [t]his is insufficient to meet its burden of demonstrating a proper primary reference.” *Id.* at 27 (citing *LKQ Corp. v. GM Global Tech. Ops.*

LLC, PGR2020-00055 (PTAB, Oct. 8, 2021). Patent Owner also points out that Petitioner was not particularly forthcoming about how the composite figures were determined, and argues specifically that “the Petition lacks any obvious explanation of Lee-616 and Exhibit 1019 to arrive at the proposed ‘composite’ images.” *Id.*

4. Analysis (Ground 1)

For the reasons below, we find that Petitioner has failed to show a reasonable likelihood that the claimed charger of the ’131 patent would have been obvious in view of Lee.

a) an overall appearance of a compact ice hockey puck shape having a top face with a circular recess that evokes a contemporary appearance . . . [t]he top face is dominated by a prominent circular recess that is inset relative to a flat ring having a distinct proportional width relative to the circular recess.

Comparing the top faces of the claimed charger, Figures 1 and 3, to Lee’s Figures 2 and 3, below, we observe that Lee’s flat ring is fairly similar in appearance to that of the claimed charger.

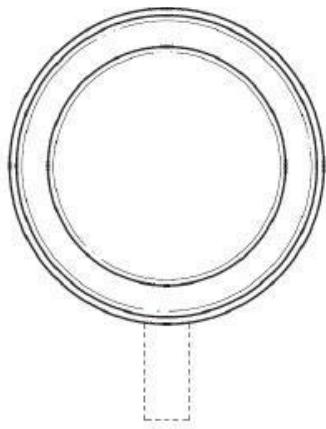


FIG. 3



FIG. 2

Figure 3 of the ’131 patent is shown on the left in comparison with Figure 2 from Lee on the right.

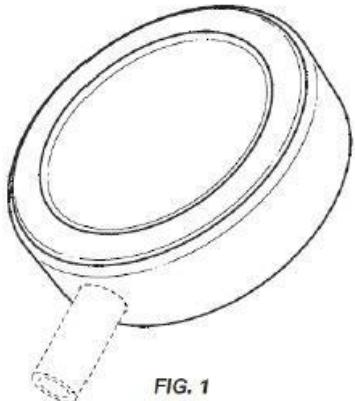
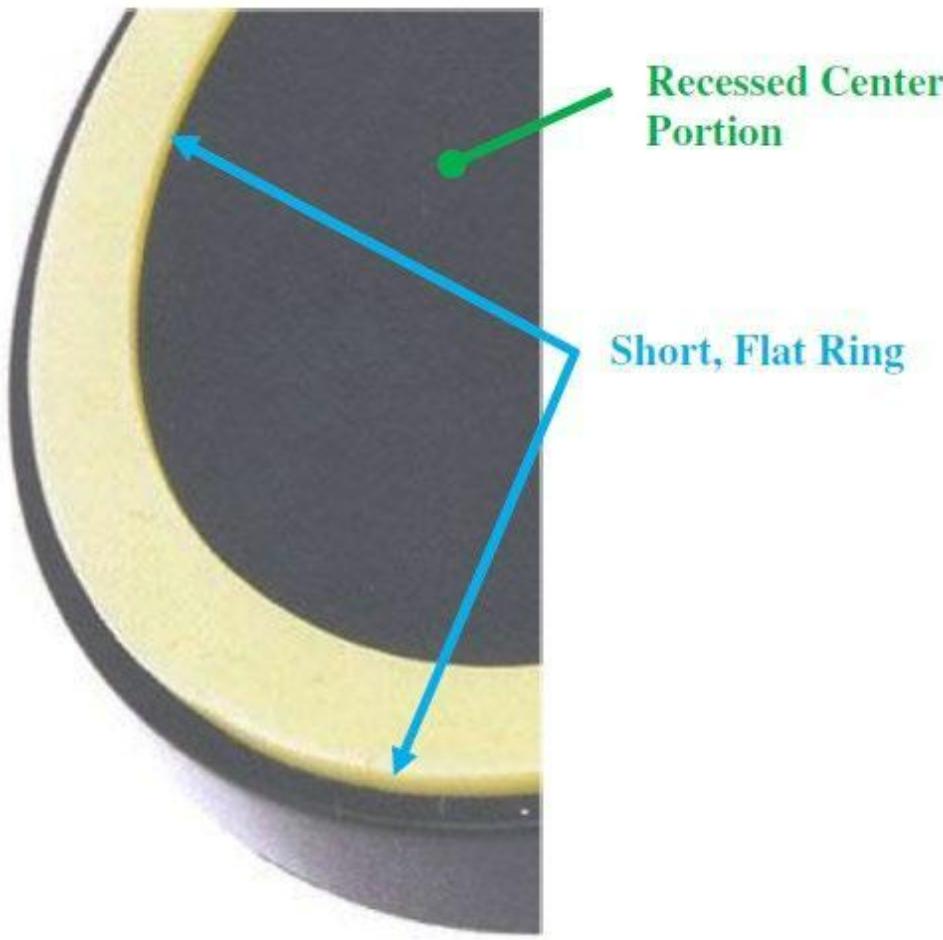


Figure 1 of the '131 patent is shown on the left in comparison with Lee's Figure 3 on the right (as rotated to be at a similar perspective view as Figure 1). The proportions of Lee's flat ring to the inner circular recess are not significantly different from the claimed design, however, it is unclear—that is we cannot discern, in Lee the inner circular recess contours, if there are any, compared to the yellow flat ring. Considering Lee's Figure 3, in a close-up view, as annotated by Petitioner, reproduced below, we agree with Petitioner that “[t]he flat ring (yellow) of Lee-616 protrudes a short height from the charger's top surface and surrounds the recessed center portion, as shown below.” Pet. 34.



This image reveals a partial close-up view of Lee's top face shown in Figure 3 as annotated by Patent Owner. We can observe, that the short flat ring is slightly raised above the top face at the ring's inner and outer diameters. On the other hand, because it is black and devoid of color or readily apparent surface features it is not entirely clear whether the inner circular recess is flat or some other contour. But, we also do not observe any particular contours indicating that Lee's inner circular recess is not flat. We further observe from this close-up view that the outermost edge of the front face is not sharp, but has a slight radius or bevel between the sidewall and the front face. As for the front face, our comparison is consistent with Mr. Delman's testimony

that a designer of ordinary skill in the art would have understood that “Lee-616 discloses a short, flat ring” and “a recessed center portion with basically the same design characteristics as the claimed design.” Ex. 1003 ¶¶ 68, 70.

b) an overall cylindrical shape, with a circular shape that is visible in plan and bottom views . . . [t]he overall cylindrical shape has a distinctive ratio of width (e.g., diameter) to height that, as shown in the figures of the claimed design, evoking the overall appearance of a compact ice hockey puck shape.

Comparing the front and rear faces of the claimed charger, Figures 1 and 2, to Lee’s Figures 3 and 4, below, we observe, again, that Lee’s flat ring is fairly similar in appearance to that of the claimed charger.

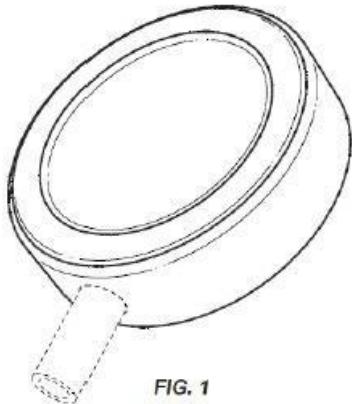


FIG. 1



FIG. 3 (rotated)

Figure 1 of the ’131 patent is shown on the left in comparison with Lee’s Figure 3 on the right (as rotated to be at a similar perspective view as Figure 1).

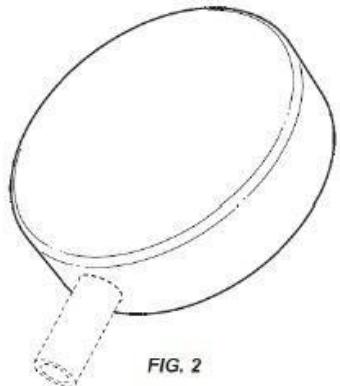


FIG. 2



FIG. 4

Figure 2 of the '131 patent is shown on the left in comparison with Lee's Figure 4 on the right comparing the rear faces of the claimed design and Lee's charger.

Both designs have a circular and cylindrical shape, however, as discussed in our claim construction, to focus solely on this general description would be improper where the '131 patent design and Lee include additional visually apparent elements which make up the overall appearances of the designs. Considering Petitioner's composite figures of Lee's charger as compared to Figures 7 and 8 of the '131 patent, we observe that there is a significant difference in the diameter to height ratio between Lee and the claimed design.



FIG. 7



FIG. 8



EX1006, Composites of FIGS. 2-4

Figures 7 and 8 of the '131 patent are shown on the left in comparison with Lee's composite Figures 2-4 on the right comparing elevational views of the

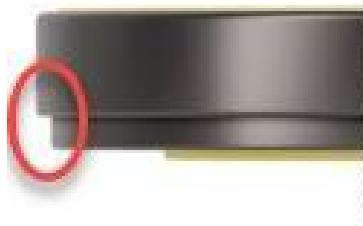
top and bottom sidewalls of each design. It is clear from even a cursory comparison that Lee is thinner and has a proportionally larger diameter compared to the distinctive smaller diameter and thicker profile of the claimed charger. Given this proportional difference in the overall appearances of the two designs Lee appears as more of a flatter, thinner, disc shape rather than a compact ice hockey puck shape.

Accordingly, we do not find that Lee would have revealed to a designer of ordinary skill in the art that the relative proportionality of the circular and cylindrical nature of Lee is basically the same as the compact ice hockey puck design of the claimed design.

c) The overall cylindrical shape includes non-orthogonal transitional edges (e.g., beveled or curved edges) between the sidewall and the top and bottom faces which contributes to the charger's overall ice hockey compact puck appearance.

As discussed above with respect to the circular edge of the top face we appreciate that, in Petitioner's close-up view, the other circular edges of Lee also appear to reveal slightly beveled or radiused circumferential edges. We note that the nature of Lee's overall cylindrical appearance being thinner and flatter than the claimed design also appears to lend a smaller radial appearance of these edges than in the claimed design. We find the radius of the circumferential edges fairly inconsequential to the overall similarities between Lee and the claimed design. Any relative similarity in appearance of the radii of the circumferential edges pales in light of the larger visual discrepancy in Lee, which is the sidewall step feature requiring not just one, but two orthogonal circumferential edges, as well as the inner circumferential corner at the transition from Lee's sidewall to the bottom

face. We reproduce a partial view of Petitioner's composite figure below as highlighted by the board.



As shown within the highlighted portion of Petitioner's partial view composite figure, the step in the sidewall of Lee is formed by a first outer circumferential edge, an inner circumferential corner, and second outer circumferential edge finally transitioning to the rear face of Lee's charger. Considering the significant impression the stepped sidewall has on the overall appearance of Lee's charger, our observation is mostly consistent with Professor Rake's description that "Lee-616's stepped surfaces provide an overall more complex design having a stacked appearance that contrasts with the simple and elegant design of the '131 Patent." Ex. 2001 ¶ 80.⁸

d) The featureless flat bottom surface and sidewall are shown as continuous, unbroken, and uninterrupted by features that distract from the continuity of the design, and also contribute to the charger's overall compact ice hockey puck appearance.

Considering the comparison above of Figures 7 and 8 of the '131 patent with the composite figures of Lee, for the reasons below we further determine that the stepped sidewalls and bottom view of Lee are

⁸ We find the word "elegant" to be fairly subjective. One person's "elegant" may be another person's kitsch. As in our claim construction, our description is "contemporary," rather than "elegant."

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significantly different in overall appearance from the clean, contemporary sidewall features and overall appearance of the claimed '131 patent.

As discussed above, Lee's sidewall has a distinctive orthogonal step between the sidewall and bottom face. Lee's step is entirely visually antithetical to the smooth linear unbroken sidewall of the claimed design. Moreover, the unbroken sidewall of the claimed design transitions to a completely flat, planer bottom surface further enhancing the clean ice hockey puck like appearance of the claimed design. Still considering the composite figures of Lee's design, the yellow ring on the bottom is visually distinct from the claimed smooth featureless planar bottom surface, not only having the distinctive yellow ring, but also because the ring is raised from the bottom face of Lee's charger as seen in the figures above.

The comparison of Figure 2 of the '131 patent with Lee's Figure 4 is reproduced below.

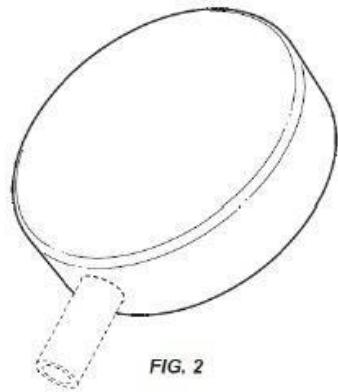


FIG. 4

Figure 2 of the '131 patent is shown on the left in comparison with Lee's Figure 4 on the right showing perspective views of the rear faces of the claimed design and Lee's charger. The rear perspective views highlight what we consider to be significant overall differences between the claimed design and Lee. Considering, again, Petitioner's composite views of Lee as well as the bottom perspective views above, not only is the sidewall step in

Lee's design visually evident in Lee's perspective *and* rear views but also in the elevational profile views of the composite figures. Viewing these distinctive elements as part of the overall appearance of the designs, the sidewall step and raised yellow ring on the bottom face of Lee have an entirely different ornamental appearance from the unbroken sidewall and smooth planar bottom face of the claimed design.

Finally, as visible in Petitioner's composite figure, below, Lee includes a rectangular connector port in the sidewall with what appears to be an internal metal connector for connecting to an electrical cord lead. Although difficult to see, Lee also appears to have a semi-elliptical opaque window in the sidewall opposite the connector port. These elements are different from the claimed design smooth sidewalls, although we acknowledge that the claimed design illustrates in dashed lines, a connector cord, that is not part of the claimed design. These differences are relatively minor in our view, but do add to the list of differences when considering the overall appearances of Lee and the claimed charger.

e) Conclusion as to Ground 1

Considering our claim construction and the overall appearance of the '131 patent compared with Lee, we are persuaded that Lee is not an appropriate primary reference. While we agree that a designer of ordinary skill in the art would have considered the front face of the claimed charger and Lee as similar in appearance, a designer of ordinary skill in the art would consider not just the front face of the designs, but the overall appearance of the designs as a whole. *See Borden*, 90 F.3d at 1574 (The obviousness "inquiry focuses on the visual impression of the claimed design as a whole and not on selected individual features.").

The overall appearance of the claimed design is dictated not only by the front face of the claimed design, but the smooth uninterrupted cylinder walls that seamlessly transition to a flat, planer, bottom surface that is a cleaner and more contemporary appearance from Lee's stepped sidewall and raised yellow ring on the bottom face of Lee's charger. The cylindrical characteristics of the claimed design evoke a stocky ice hockey puck shaped appearance different from the Lee's narrower stacked disc shaped design. We find that the cumulative visually apparent differences of the sidewall, bottom face and overall cylindrical ice hockey puck shaped appearance and proportions of the claimed charger outweigh any similarity of the front faces, and thus we are not persuaded that Lee's charger is a primary reference "the design characteristics of which are basically the same as the claimed design." *Rosen*, 673 F.2d at 391.

E. Ground 2 – Alleged Obviousness over Lee (Ex. 1006) and Chiang (Ex. 1009)

Because we determine that Lee is not an appropriate primary reference, the combination with Chiang does not remedy the lack of a primary reference. Accordingly, we need not reach this ground.

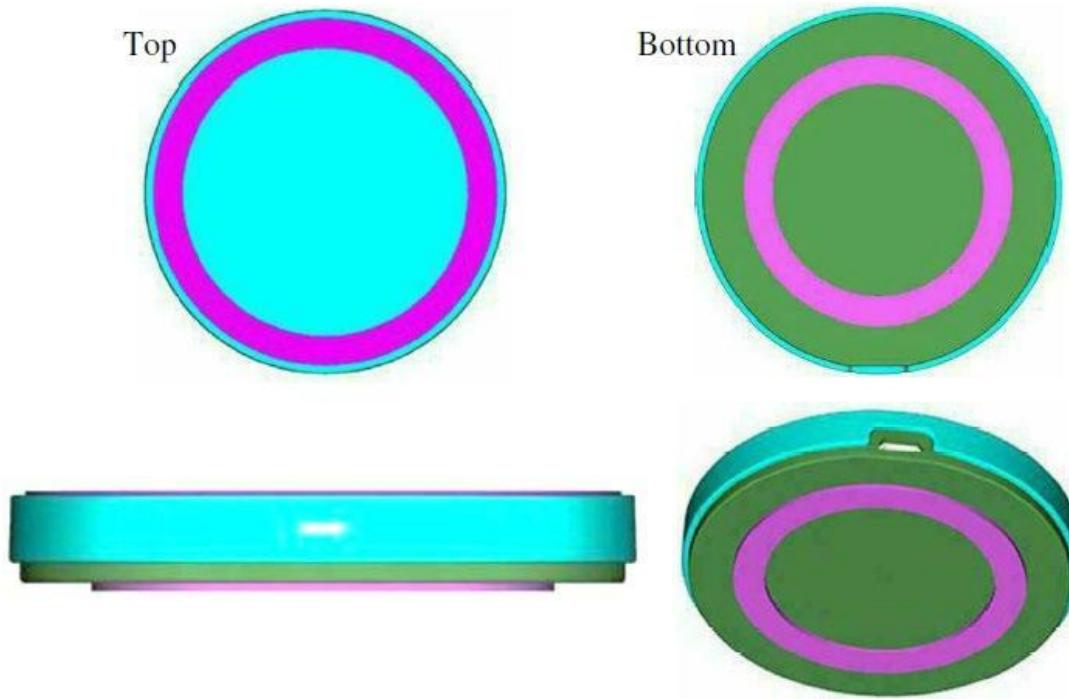
F. Ground 3 – Alleged Obviousness over CN-470 (Ex. 1007)⁹

On this record, Petitioner has not established a reasonable likelihood of prevailing on its assertion that the claimed design would have been obvious over CN-470 for the reasons explained below.

⁹ We refer in this Decision to Exhibit 1007 which is the certified English translation of the original Chinese design registration document for CN-470, Exhibit 1011.

1. *CN-470 (Ex. 1007)*

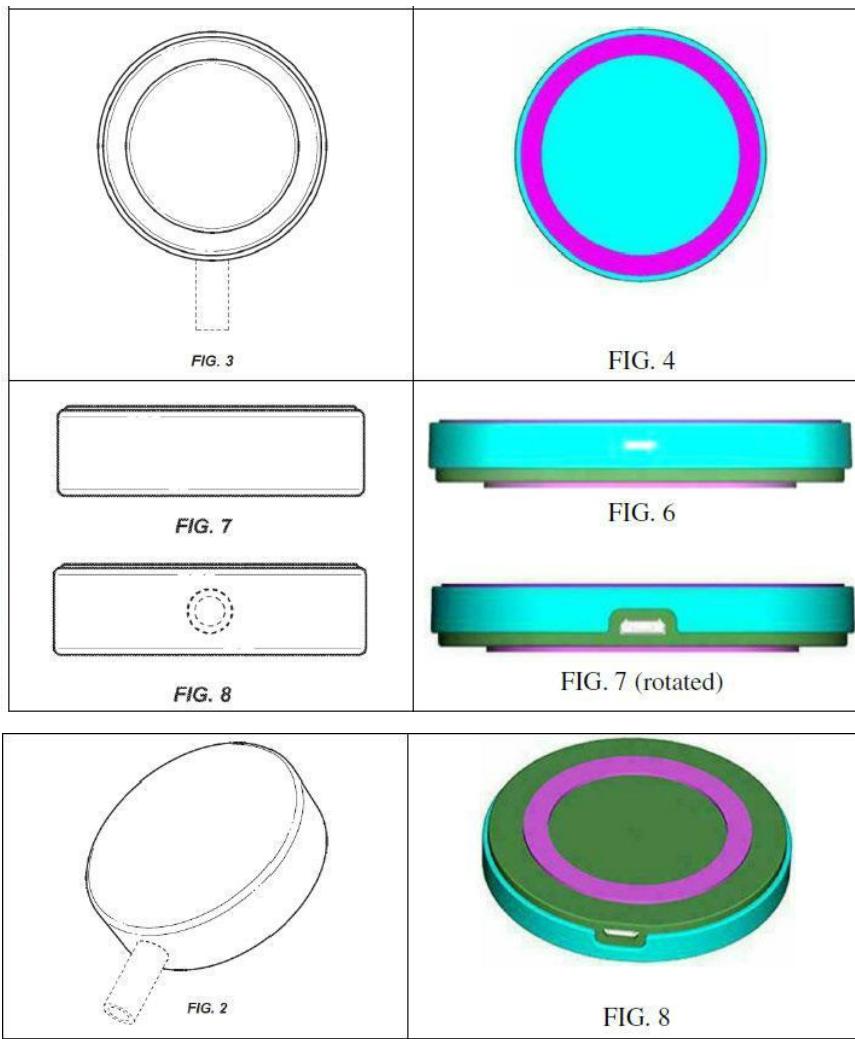
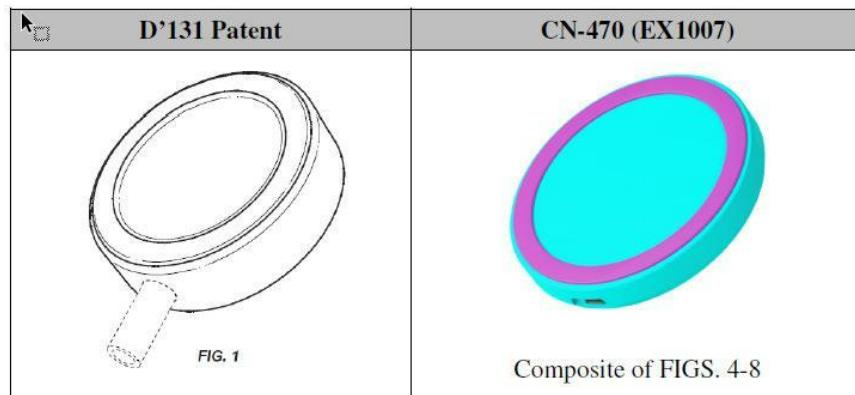
CN-470 is a Chinese design registration (Chinese Design Reg. No. 302864470) describing “a wireless charging transmitter that supplies power to electronic products in the form of electromagnetic waves.” Ex. 1007, Abstract. We reproduce four images as provided in the Petition from CN-470 below. Pet. 36.



The four CN-470 images reproduced from the Petition (page 36) include a front (top) face including a flat ring (pink), a rear (bottom) face including a flat ring (pink), a side elevation view, and a rear face perspective view.

2. *Petitioner's Arguments*

Petitioner provides the following chart, reproduced below, showing a comparison of the CN-470 wireless charger with Figures 1, 2, 3, 7, and 8 of the claimed design. *Id.* at 59–60.



Petitioner's chart relating to Ground 3 compares side-by-side Figures 1–3, 7, and 8 of the '131 patent with respective images of the CN-470 wireless charger.

Petitioner argues that "CN-470 is an appropriate primary reference because it is a single prior art reference with basically the same design characteristics as the claimed design." Pet. 58 (citing Ex. 1007, Figs. 2–4; Ex. 1003 ¶¶ 84–96). According to Petitioner, the comparison above "demonstrates that CN-470 is an appropriate primary reference because its design conveys basically the same overall visual impression as the claimed design." *Id.* at 60. More specifically, Petitioner argues that "CN-470 and the claimed design have a cylindrical shape with a flat bottom surface and rounded edges that provide the same overall visual impression." *Id.* Petitioner acknowledges that "[t]he CN-470 cylinder has a slightly larger width-to-height ratio than the claimed design, but that difference, or any difference in the dimensions or proportions of the cylindrical shapes of CN-470 and the claimed design, does not alter the overall visual similarity of these designs." *Id.* at 62 (citing Ex. 1001, Figs. 1–3; Ex. 1007, Figs. 4, 5, 8; Ex. 1003 ¶ 86).

Conceding that "there is a step transition between the sidewall of CN-470's cylinder and the bottom surface, and CN-470's flat bottom surface also includes a flat ring," Petitioner argues that "neither difference alters the overall visual similarity between CN-470 and the claimed design, for the same reasons explained above with respect to the Lee-616." *Id.* at 62. Petitioner contends that none of the apparent differences prevent CN-470 from being used as a primary reference. *Id.* at 63 (citing *MRC*, 747 F.3d at 1332–33).

3. Patent Owner's Arguments

Patent Owner argues that CN-470 is not a proper primary reference because “CN-470 lacks the claimed design’s distinctive circular *concave* recess that contributes to its nest or cradle visual appearance and claimed design’s compact puck shape.” Prelim. Resp. 49. Patent Owner also argues that Petitioner’s comparison chart at page 59 of the Petition has fabricated a composite perspective view of CN-470’s charger. *Id.* at 50 (“CN-470’s deficiencies as a *Rosen* reference are confirmed by Masimo’s need to create artificial composite views to indicate purported details that are entirely absent from its published drawings”) (citing Ex. 1003, n. 2–3). According to Patent Owner, “Petitioner provides no clear explanation for the appearance of the ‘[c]omposite’ view, or how it determined the features of the ‘[c]omposite’ view.” *Id.* at 51.

Patent Owner makes several other arguments, *inter alia*, that “Petitioner fails to meet its burden of demonstrating CN-470 as a proper primary reference because its ‘composite’ view presents an appearance that is simply not discernable from the figures of CN-470.” *Id.* at 52. More specifically, Patent Owner argues that “CN-470’s inclusion of design elements dissimilar to the elements of the patented design, such as its stepped surfaces, contributes to an overall more complex design having a stacked appearance that contrasts with the simple and elegant design provided by the ’131 Patent.” *Id.* at 58 (citing Ex. 2001 ¶¶ 124–126).

4. Analysis (Ground 3)

For the reasons below, we find that Petitioner has failed to show a reasonable likelihood that the claimed charger of the ’131 patent would have been obvious in view of CN-470.

a) an overall appearance of a compact ice hockey puck shape having a top face with a circular recess that evokes a contemporary appearance . . . [t]he top face is dominated by a prominent circular recess that is inset relative to a flat ring having a distinct proportional width relative to the circular recess.

Comparing the top faces of the claimed charger, Figures 1 and 3, to CN-470's Figure 4 and composite figure, below, we observe that CN-470's flat ring (pink) is fairly similar in appearance to that of the claimed charger.

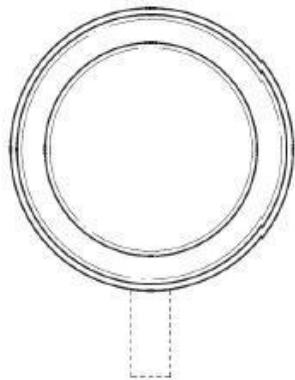


FIG. 3

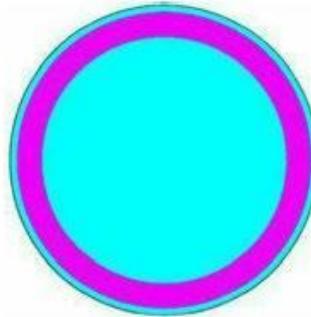


FIG. 4

Figure 3 of the '131 patent is shown on the left in comparison with Figure 4 of CN-470 on the right.

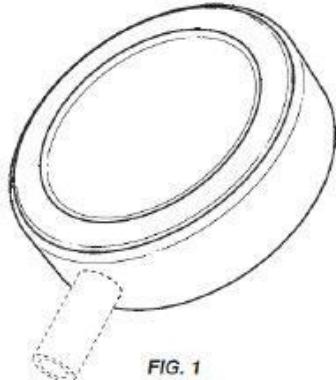


FIG. 1



Composite of FIGS. 4-8

Figure 1 of the '131 patent is shown on the left in comparison with CN-470's composite Figure 4–8 on the right. The proportions of CN-470's flat ring to the inner circular recess are not significantly different from the

claimed design, however, it is even less clear here than in Lee, that the inner circular portion on the top face of CN-470 is a recessed or contoured surface relative to the pink flat ring. It is only from Petitioner's composite figure that sufficient visual detail is available to potentially agree with Petitioner that "the recessed center portion of CN-470 (surrounded by the pink ring) and the claimed design [] provide the same overall visual impression."

Pet. 65.

As for the front face, our comparison is mostly consistent with Mr. Delman's testimony that a designer of ordinary skill in the art would have understood that "CN-470 discloses a short, flat ring" and "a recessed center portion with basically the same design characteristics as the claimed design." Ex. 1003 ¶¶ 92, 94.

b) an overall cylindrical shape, with a circular shape that is visible in plan and bottom views . . . [t]he overall cylindrical shape has a distinctive ratio of width (e.g., diameter) to height that, as shown in the figures of the claimed design, evoking the overall appearance of a compact ice hockey puck shape.

Comparing the front and rear faces of the claimed charger, Figures 1 and 2, respectively, to CN-470's composite figure and Figure 8, below, we observe that CN-470's flat ring on the front face is fairly similar in appearance to that of the claimed charger.

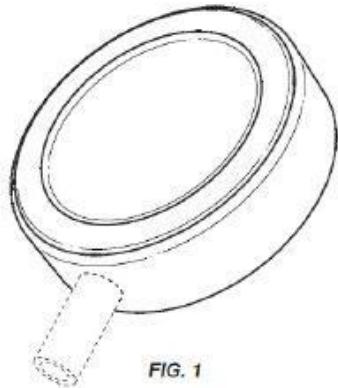


FIG. 1



Composite of FIGS. 4-8

Figure 1 of the '131 patent is shown on the left in comparison with CN-470's composite figure on the right depicting the front faces of the claimed design and the CN-470 charger.

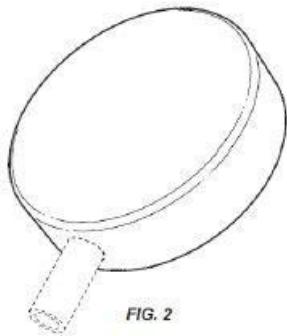


FIG. 2



FIG. 8

Figure 2 of the '131 patent is shown on the left in comparison with CN-470's Figure 8 on the right and show the rear faces of the claimed design and CN-470's charger.

Both designs have a circular and cylindrical shape, however, as discussed in our claim construction, to focus solely on this general description is improper where the '131 patent design and CN-470 include additional visually apparent elements which make up the overall appearances of the designs. Considering Figures 6 and 7 of CN-470's charger as compared to Figures 7 and 8 of the '131 patent, we observe that

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there is a significant difference in the diameter to height ratio between CN-470 and the claimed design.



FIG. 7

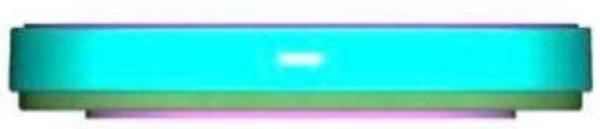


FIG. 6

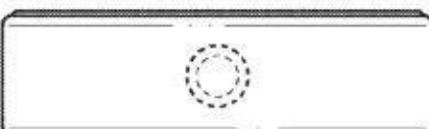


FIG. 8

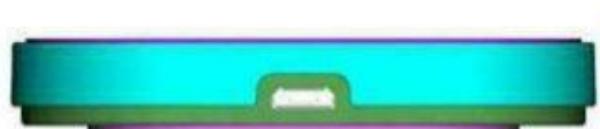


FIG. 7 (rotated)

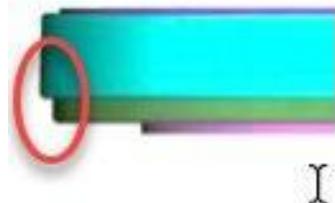
Figures 7 and 8 of the '131 patent are shown on the left in comparison with CN-470's Figures 6–7 on the right comparing respective elevational views of the sidewall of each design. It is clear from even a cursory comparison that CN-470 is thinner and has a proportionally larger diameter compared to the distinctive smaller diameter and thicker profile of the claimed charger. Given this proportional difference in the overall appearances of the two designs CN-470 appears as more of a flatter, thinner, disc shape rather than a compact ice hockey puck shape.

Accordingly, we do not find that CN-470 would have revealed to a designer of ordinary skill in the art that the relative proportionality of the circular and cylindrical nature of CN-470 is basically the same as the compact ice hockey puck appearance of the claimed design.

c) The overall cylindrical shape includes non-orthogonal transitional edges (e.g., beveled or curved edges) between the sidewall and the top and bottom faces which contributes to the charger's overall compact ice hockey puck appearance.

With respect to the circular edges of the top and bottom faces, we appreciate that the circular edges of CN-470 appear to reveal slightly

beveled or curved circumferential edges. We note that the nature of CN-470's overall cylindrical appearance being thinner and flatter than the claimed design also appears to lend a smaller radial appearance of these edges than in the claimed design. We find any similarity of the radii of the circumferential edges fairly inconsequential to the overall disparity between CN-470 and the claimed design. Any relative similarity in appearance of the radii of the circumferential edges pales in light of the larger visual discrepancy in CN-470, which is the sidewall step feature requiring not just one, but two orthogonal circumferential edges, as well as the inner circumferential corner edge, at the transition from CN-470's sidewall to the bottom face. We reproduce a partial view of Petitioner's composite figure below as highlighted by the board.



As shown within the highlighted portion of the partial view of CN-470's Figure 6, the step in the sidewall of Lee is formed by a first outer circumferential edge, an inner circumferential corner, and second outer circumferential edge finally transitioning to the bottom face of CN-470's charger. Considering the overall impression the stepped sidewall has on the overall appearance of the CN-470 charger, our observation is consistent with Professor Rake's description that "CN-470 includes stacked, concentric cylinders of different diameters creating a stepped sidewall design that is entirely distinct from the visual appearance of the patented design."

Ex. 2001 ¶ 123.

d) The featureless flat bottom surface and sidewall are shown as continuous, unbroken, and uninterrupted by features that distract from the continuity of the design, and also contribute to the charger's overall compact ice hockey puck appearance.

Considering the comparison above of Figures 7 and 8 of the '131 patent with CN-470's Figures 6 and 7, for the reasons below we further determine that the stepped sidewalls and bottom view of Lee are significantly different in overall appearance from the clean, contemporary features and overall appearance of the claimed '131 patent.

As discussed above, CN-470's sidewall has a distinctive orthogonal step between the sidewall and bottom face. CN-470's stacked appearance is visually antithetical to the smooth linear unbroken sidewall of the claimed design. Moreover, the unbroken sidewall of the claimed design transitions to a completely flat, planer rear surface further enhancing the clean ice hockey puck like appearance of the claimed design. Again, considering CN-470's Figure 8, the pink ring on the rear surface is visually distinct from the claimed smooth featureless planar rear surface, not only due to the distinctive pink ring, but also because the ring is raised above the rear face of CN-470's charger.

The comparison of Figure 2 of the '131 patent with CN-470's Figure 8 is reproduced below.

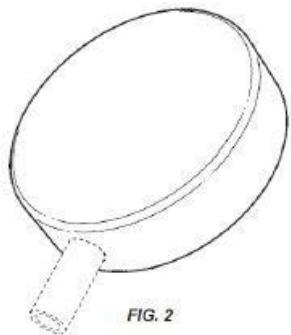


FIG. 2



FIG. 8

Figure 2 of the '131 patent is shown on the left in comparison with CN-470's Figure 8 on the right and compare, in perspective views, the rear faces of the claimed design and CN-470's charger. The rear perspective views highlight what we consider to be significant overall ornamental differences between the claimed design and CN-470. Considering, again, Petitioner's composite views of CN-470 as well as the rear perspective views above, not only is the sidewall step in CN-470's design visually evident in CN-470's perspective *and* rear views but also in the elevational profile views of the composite figures. Viewing these distinctive elements as part of the overall appearance of the designs, the sidewall step, stacked appearance, and raised yellow ring on the rear face of CN-470 presents an entirely different, busier, ornamental appearance from the unbroken sidewall and smooth planar rear face of the claimed design.

Finally, as visible in CN-470's Figure 8, the sidewall includes a rectangular connector port in the sidewall for connecting to an electrical cord or lead. Also, in Figure 6, CN-470 appears to have a semi-elliptical opaque window in the sidewall opposite the connector port. These elements are different from the claimed design's smooth sidewalls, although we acknowledge that the claimed design illustrates in dashed lines, a connector cord, that is not part of the claimed design. These differences are relatively

minor, in our view, but add to the list of differences when considering the overall appearances of CN-470 and the claimed charger.

e) Conclusion as to Ground 3

Considering our claim construction and the overall appearance of the claimed charger illustrated in the '131 patent compared with CN-470, we are persuaded that CN-470 is not an appropriate primary reference. While we agree that a designer of ordinary skill in the art would have considered the front face of the claimed charger and CN-470 as substantially similar in appearance, a designer of ordinary skill in the art would consider not just the front face of the designs, but the overall appearance of the designs as a whole. *See Borden*, 90 F.3d at 1574 (The obviousness “inquiry focuses on the visual impression of the claimed design as a whole and not on selected individual features.”).

The overall appearance of the claimed design is dictated not only by the front face of the claimed design, but the smooth uninterrupted cylinder walls that seamlessly transition to a flat, planer, bottom surface that is a cleaner and more contemporary appearance from CN-470’s stepped sidewall and raised yellow ring on the bottom face of CN-470’s charger. The cylindrical characteristics of the claimed design evoke a stocky ice hockey puck shaped appearance different from Lee’s narrower stacked disc shaped design. We find that at least the visually apparent differences of the sidewall, bottom face and overall cylindrical ice hockey puck shaped appearance of the claimed charger outweigh the similarity of the front faces, and thus we are not persuaded that CN-470’s charger is a primary reference “the design characteristics of which are basically the same as the claimed design.” *Rosen*, 673 F.2d at 391.

G. Ground 4 - Alleged Obviousness over CN-470 (Ex. 1007) and Chiang (Ex. 1009)

Because we determine that CN-470 is not an appropriate primary reference, the combination with Chiang does not remedy the lack of a primary reference. Accordingly, we need not reach this ground.

H. Ground 5 – Alleged Obviousness over Murray (Ex. 1008)

On this record, Petitioner has not established a reasonable likelihood of prevailing on its assertion that the claim would have been obvious over Murray for the reasons explained below.

1. Murray (Ex. 1008)

Murray, US Design Patent No. D718,236 S titled “Charger,” claims the “ornamental design for a charger, as shown and described.” Ex. 1008, code (57). We reproduce Murray’s Figures 1–7 below.

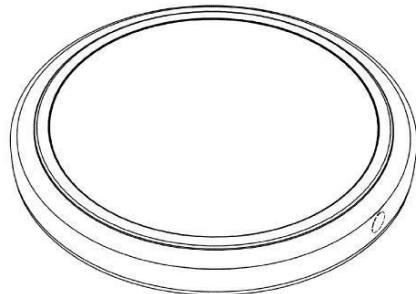


FIG. 1

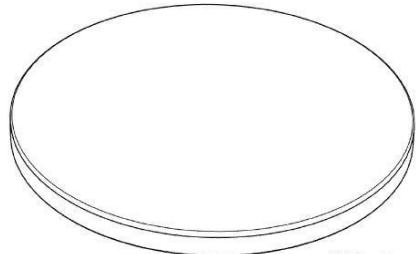


FIG. 2

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Murray's Figures 1 and 2 illustrate front and rear perspective views of the claimed charger.

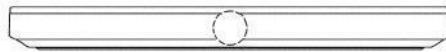


FIG. 3

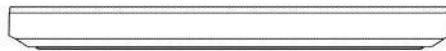


FIG. 4

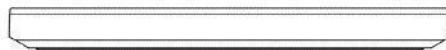


FIG. 5

Figures 3, 4, and 5 illustrate side elevation views of the claimed charger.

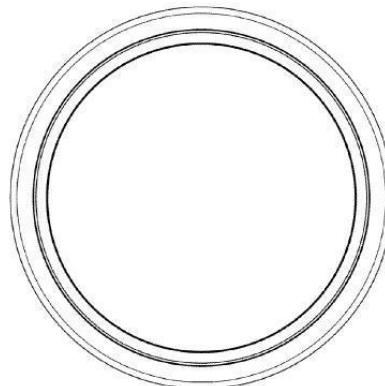


FIG. 6

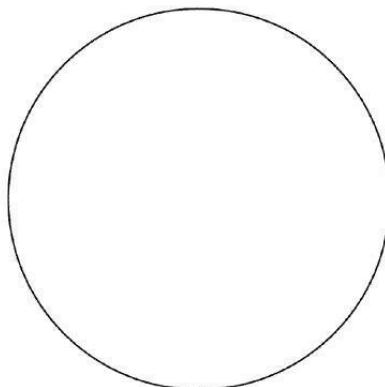
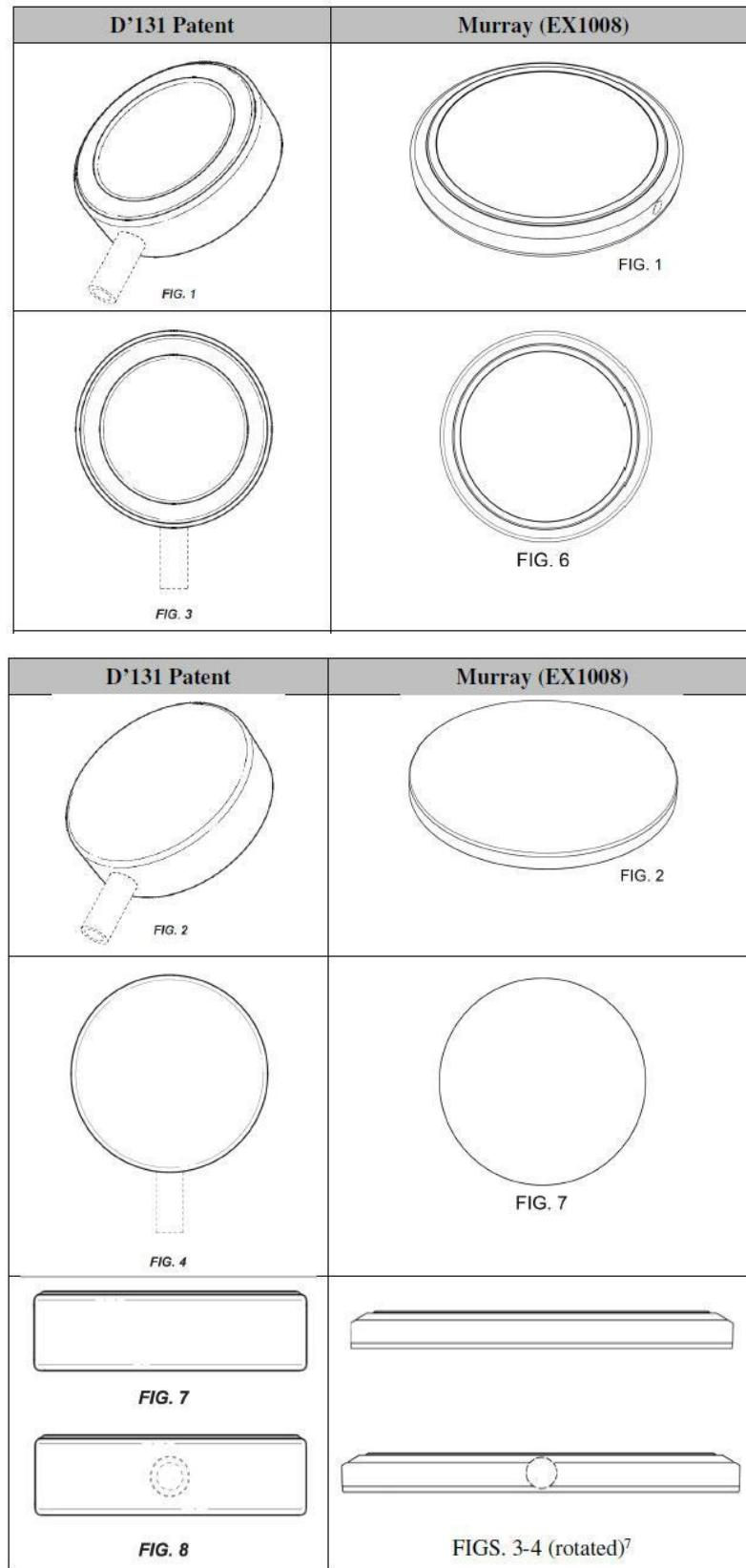


FIG. 7

Figures 6 and 7 illustrate plan front and rear views of the claimed charger.

2. *Petitioner's Arguments*

Petitioner provides the following chart(s), reproduced below, showing a comparison of Murray's charger with Figures 1–4, 7, and 8 of the claimed design. *Id.* at 74–75.



Petitioner's chart(s) relating to Ground 5 compare side-by-side Figures 1–4, 7, and 8 of the '131 patent with respective images of Murray's charger.

Petitioner argues that “[t]he above comparison demonstrates that Murray is an appropriate primary reference because its design conveys basically the same overall visual impression as the claimed design.” Pet. 76 (citing Ex. 1001, Figs. 1–4, 7–8; Ex. 1008, Figs. 1–7; Ex. 1003 ¶ 106). More specifically, Petitioner argues that “the chargers of Murray and the claimed design have a cylindrical shape with a flat bottom surface and rounded edges that provide the same overall visual impression.” *Id.* Petitioner acknowledges that “[t]he Murray cylinder has a slightly larger width-to-height ratio than the claimed design, but that difference, or any difference in the dimensions or proportions of the cylindrical shapes of Murray and the claimed design, does not alter the overall visual similarity of these designs.” *Id.* at 78 (citing Ex. 1001, Figs. 1–4, 7–8; Ex. 1008, Figs. 1–7; Ex. 1003 ¶ 108).

Conceding that Murray “has chamfered instead of rounded top edges,” Petitioner argues “that slight difference does not alter the overall visual similarity between Murray and the claimed design, both of which have ordinary, well-known transitions (i.e., rounded and chamfered edges) between the surfaces of their cylindrical chargers.” *Id.* at 79. Petitioner contends that none of the apparent differences prevent Murray from being used as a primary reference. *Id.* (citing Ex. 1001, Figs. 1–4, 7–8; Ex. 1008, Figs. 1–7; Ex. 1003 ¶ 108). Petitioner makes other arguments, including that on the front faces, the difference between Murray's flat ring and the claimed

charger's flat ring "do not alter the overall visual similarity of these designs." *Id.* at 80.

3. Patent Owner's Arguments

Patent Owner argues that Murray is not a proper primary reference because "Murray lacks the claimed design's distinctive circular *concave* recess that contributes to its nest or cradle visual appearance and its compact puck shape." Prelim. Resp. 66 (citing Ex. 2001 ¶ 148). Patent Owner argues specifically that "unlike the patented design, Murray does *not* have a top major face with a circular *concave* recess—or any recessed contour—in its center portion." *Id.* at 67 (citing Ex. 2001 ¶ 150). Patent Owner contends that "Murray's design merely has a ring that is adjacent to the planar central surface . . . [m]oreover, the figures appear to suggest that the ring's top surface is flush with the center portion." *Id.* at 68 (citing Ex. 2001 ¶¶ 152–154).

Patent Owner makes several other arguments, *inter alia*, that compared to the claimed designs ice hockey puck shape, "Murray's design has an overall appearance that is substantially wider and flatter." *Id.* at 70 (citing Ex. 2001 ¶ 161). More descriptively, Patent Owner argues that "Murray's design noticeably suggests the appearance of a plate or a coaster, even more so than the similarly deficient designs of Lee-616 and CN-470." *Id.* Also, Patent Owner argues that in contrast to the claimed non-orthogonal, i.e., radiused or curved edges, between the sidewall and top and bottom surfaces, "Murray includes thin stacked, concentric discs, with chamfered upper edges at a transition between its middle and upper discs, creating the appearance of a different diameter between the middle and upper discs." *Id.* at 72 (citing Ex. 2001 ¶ 166; Ex. 1008, Fig. 3).

4. Analysis (Ground 5)

For the reasons below, we find that Petitioner has failed to show a reasonable likelihood that the claimed charger of the '131 patent would have been obvious in view of Murray.

a) an overall appearance of a compact ice hockey puck shape having a top face with a circular recess that evokes a contemporary appearance . . . [t]he top face is dominated by a prominent circular recess that is inset relative to a flat ring having a distinct proportional width relative to the circular recess.

Comparing the top faces of the claimed charger, Figures 1 and 3, to Murray's Figure 6 and Figure 1, below, we observe that Murray's flat ring appears quite different to that of the claimed charger.

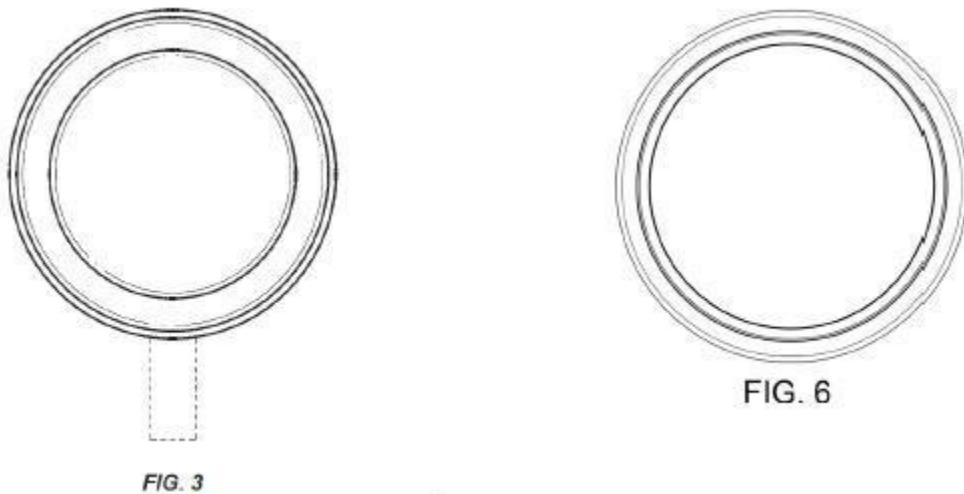


Figure 3 of the '131 patent is shown on the left in comparison with Murray's Figure 6 on the right.

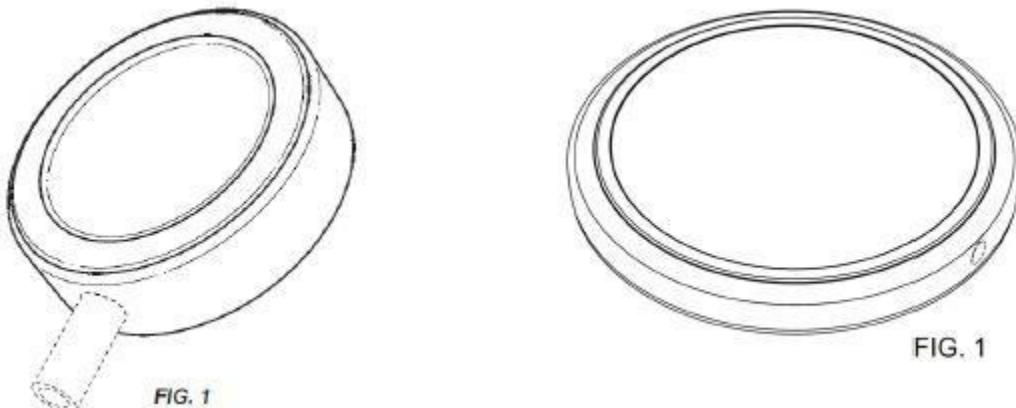


Figure 1 of the '131 patent is shown on the left in comparison with Murray's Figure 1 on the right. At first glance, Murray's flat ring is significantly thinner creating a different proportional appearance relative to the center region when compared to the claimed charger. In Murray, we can see that above the chamfered portion of the sidewall the adjacent circumferential lines depicting the flat ring indicate some amount of relative height should be accorded the flat ring, at least relative to the chamfer. There is not, however, any similar adjacent circumferential line inside the inner edge of Murray's flat ring that would indicate a circular recess. This is noticeably different from the claimed charger which illustrates a readily identifiable center circular recess.

Considering Murray's front face, in this instance our comparison is consistent with Professor Rake's testimony, that a designer of ordinary skill in the art would have understood that "Murray lacks a recessed center portion of any kind" and "does not show any step or recess between the inner wall of its ring [] and its flat top surface [] surrounded by Murray's ring." Ex. 2001 ¶¶157–158.

b) an overall cylindrical shape, with a circular shape that is visible in plan and bottom views . . . [t]he overall cylindrical shape has a distinctive ratio of width (e.g., diameter) to height that, as shown in the figures of the claimed design, evoking the overall appearance of a compact ice hockey puck shape.

Comparing the front and rear faces of the claimed charger, Figures 1 and 2, respectively, to Murray's Figures 1 and 2, below, as we discussed above Murray's flat ring and center portion are noticeably different in appearance from the claimed charger, but, are indeed cylindrical.



FIG. 1

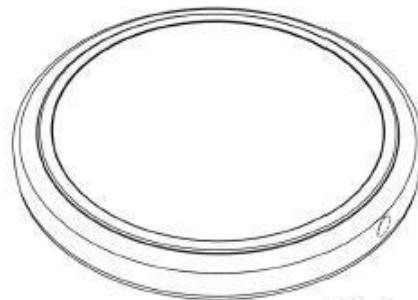


FIG. 1

Figure 1 of the '131 patent is shown on the left in comparison with Murray's Figure 1 on the right depicting the front faces of the claimed design and Murray's charger.

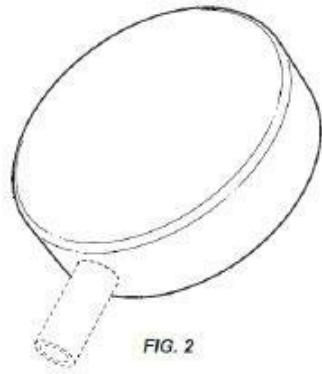


FIG. 2

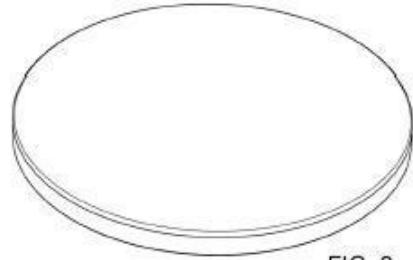


FIG. 2

Figure 2 of the '131 patent is shown on the left in comparison with Murray's Figure 2 on the right and show the rear faces of the claimed design and

Murray's charger. We acknowledge that the rear faces of the designs are both circular and flat and transition by what appears to be similar radii, or bevel, i.e., a non-orthogonal edge, to the respective sidewalls.

Both designs have a circular and cylindrical shape and an unadorned flat rear face, however, as discussed in our claim construction, to focus solely on such general description, and one or two similar elements, would be improper where the '131 design and Murray include additional significantly visually disparate elements which make up the overall appearances of the designs.

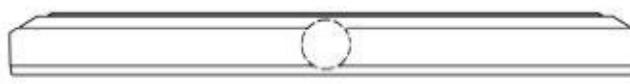
Considering Figures 3–4 of Murray's charger as compared to Figures 7 and 8 of the '131 patent, we observe that there is also a significant difference in the diameter to height ratio between Murray and the claimed design.



FIG. 7



FIG. 8



FIGS. 3-4 (rotated)⁷

Figures 7 and 8 of the '131 patent are shown on the left in comparison with Murray's Figures 3–4 on the right comparing top and bottom elevational views of the sidewall of each design. It is clear from even a cursory comparison that Murray is thinner and has a proportionally larger diameter compared to the distinctive smaller diameter and stockier profile of the claimed charger. Given this proportional dissimilarity in the overall

appearances of the two designs Murray appears as more of a flatter, thinner, disc shape rather than a compact ice hockey puck shape. We find Professor Rake's testimony persuasive in this regard, namely that for the claimed design “[t]he width-to-height ratio is fundamental to the compact puck appearance of the claimed design and its absence from Murray is a conspicuous deficiency,” and “Murray's flatter, wider dinner plate design does not evoke an impression of a design resembling a compact puck.”

Ex. 2001 ¶¶ 164–165.

Accordingly, we do not find that these differences are *de minimis* or that Murray would have revealed to a designer of ordinary skill in the art that the relative proportionality of the circular and cylindrical nature of Murray is basically the same as the compact ice hockey puck design of the claimed design.

c) The overall cylindrical shape includes non-orthogonal transitional edges (e.g., beveled or curved edges) between the sidewall and the top and bottom faces which contributes to the charger's overall compact ice hockey puck appearance.

With respect to the circular non-orthogonal transitional edges of the top and bottom faces of the claimed charger, Murray's Figure 2 below illustrates a bottom circular edge that appears as a rounded or beveled edge between the sidewall and rear face of the claimed design.

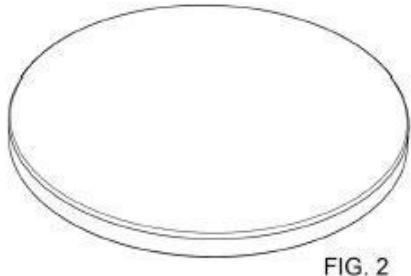
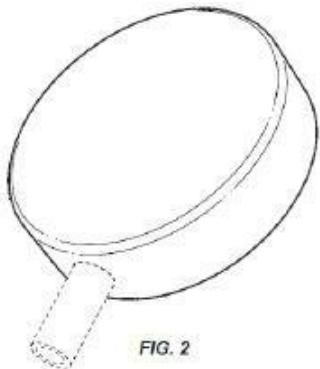
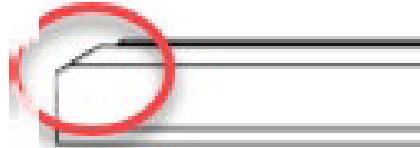


Figure 2 of the '131 patent is shown on the left in comparison with Murray's Figure 2 on the right and show the respective rear faces and similar bottom circular non-orthogonal edges of the claimed design and Murray's charger. However, this is not the case for the front faces, which in our view are quite different. A partial view of Murray's Figure 3 is reproduced below as annotated by the Board.



The partial side view of Murray's Figure 3 reveals a distinctly sloped chamfer between the front face and sidewall. This chamfer is significantly larger and longer than the claimed design. The chamfer includes a layer that appears as a stacked or layered conical section supporting the flat ring on the front face of the charger. The longer chamfer and conical section lends a flattened appearance to Murray's charger at the transition between the sidewall and front face of Murray's charger. The chamfer and conical section provides, in our view, an overall more truncated cylinder as compared to the stockier impression created by the claimed charger.

We find Professor Rake's testimony here generally consistent with our view that "Murray includes stacked, concentric discs of at least two different respective diameters from its chamfered upper edge creating an overall tapered (or slightly domed) appearance of the top surface, rather than the compact puck appearance conveyed by the claimed design." Ex. 2001 ¶ 167.

d) The featureless flat bottom surface and sidewall are shown as continuous, unbroken, and uninterrupted by features that distract from the continuity of the design, and also contribute to the charger's overall compact ice hockey puck appearance.

Figure 2 below illustrates a bottom face of the claimed design compared to Murray's rear face as shown in Figure 2.

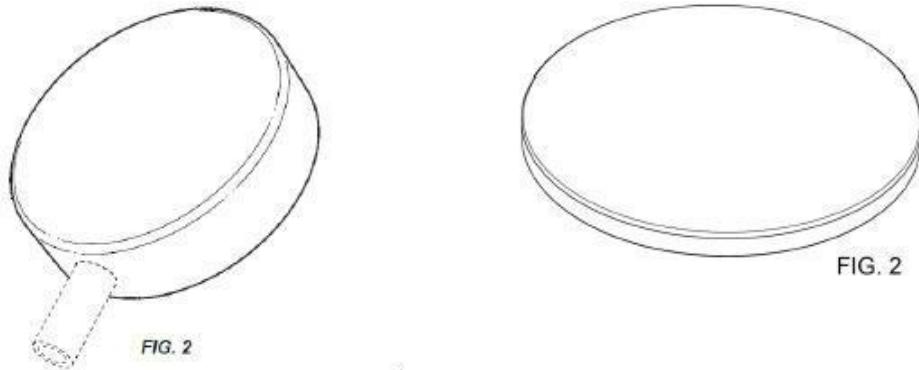


Figure 2 of the '131 patent is shown on the left in comparison with Murray's Figure 2 on the right and show the respective rear faces of the claimed design and Murray's charger. Considering the comparison above of Murray's Figure 2 with Figure 2 of the '131 patent, the flat planar rear face of Murray is not unlike the rear face of the claimed design. This, however, appears to us to be the main similarity between these designs. As discussed above, Murray's sidewall has a distinctive bevel and layered or stacked appearance between the sidewall and front face. Murray's bevel and stacked

appearance is visually antithetical to the smooth linear unbroken sidewall with matching upper and lower circumferential transitions to the upper and rear faces of the claimed design. Although we acknowledge similarities in the flat planar rear face of Murray and the claimed design, Murray's sidewall and front face, along with its flatter overall proportionality, is visually distinct from the ice hockey puck appearance of the claimed charger.

With respect to the sidewalls, the comparison of Figure 1 of the '131 patent with Murray's Figure 1 is reproduced below.

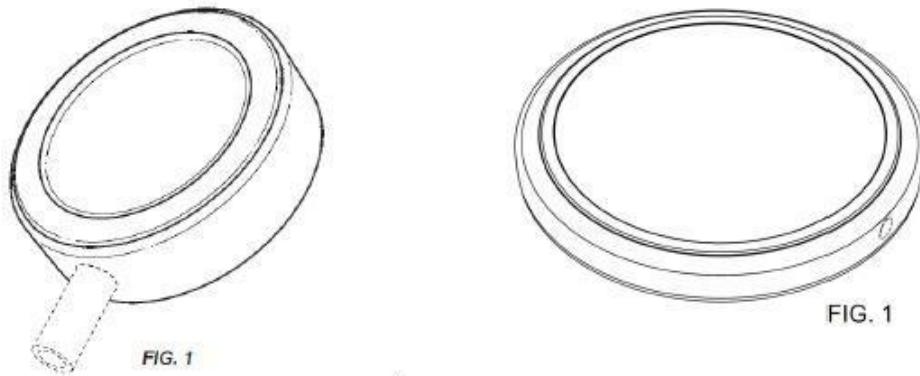


Figure 1 of the '131 patent is shown on the left in comparison with Murray's Figure 1 on the right and illustrate, in perspective views, the front faces and sidewalls of the claimed design and Murray's charger. These perspective views highlight what we consider to be significant overall ornamental differences between the claimed design and Murray. As discussed above, there is a substantial visual disparity in the front face flat ring proportions as well as the lack of any indicia of a recess in Murray's center portion. Additionally, the long chamfer between Murray's front face and sidewall is particularly glaring and provides a different proportional appearance of being thin and flat, rather than stocky and ice hockey puck shaped as in the

claimed design. Viewing these distinctive elements as part of the overall appearance of the designs, we are persuaded that Murray has an entirely different ornamental appearance from the unbroken sidewall and smooth planar bottom face of the claimed design.

We find Professor Rake's testimony compelling where he describes that "Murray's elongated width, compressed height, and tapered top surface, contributes to an overall more complex design having a stacked appearance. These aspects of Murray's design differ substantially from the simple and elegant design provided by the '131 Patent. Murray simply does *not* convey the distinctive visual impression of the claimed design's compact, concave puck design." Ex. 2001 ¶ 168.

e) Conclusion as to Ground 5

Considering our claim construction and the overall appearance of the claimed charger illustrated in the '131 patent compared with Murray, we are persuaded that Murray is not an appropriate primary reference. While we agree that a designer of ordinary skill in the art would have considered the rear face of the claimed charger and Murray as substantially similar in appearance, a designer of ordinary skill in the art would consider not just the rear face of the designs, but the overall appearance of the designs as a whole. *See Borden*, 90 F.3d at 1574 (The obviousness "inquiry focuses on the visual impression of the claimed design as a whole and not on selected individual features.").

The overall appearance of the claimed design is dictated not only by the rear face of the claimed design, but the smooth uninterrupted cylinder walls that seamlessly transition to a flat, planer, bottom surface that is a cleaner and more contemporary appearance from Murray's truncated

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sidewall and narrow flat ring on the front face of Murray's charger. The overall cylindrical characteristics of the claimed design evoke a stocky puck shaped appearance different from Murray's flatter, stacked and conical layered design. We find that at least the visually apparent differences of the sidewall, front face and overall cylindrical puck shaped appearance of the claimed charger outweigh the similarity of the rear faces and the transition between the rear face and sidewall. Accordingly, we are not persuaded that Murray's charger is a primary reference "the design characteristics of which are basically the same as the claimed design." *Rosen*, 673 F.2d at 391; *see also High Point Design*, 730 F.3d at 1311–12 (The obviousness analysis for design patents includes "a two-part inquiry under which 'a court must both '(1) discern the correct visual impression created by the patented design as a whole; and (2) determine whether there is a single reference that creates 'basically the same' visual impression.'").

I. Ground 6 – Alleged Obviousness over Murray (Ex. 1008) and Chiang (Ex. 1009)

Because we determine that Murray is not an appropriate primary reference, the combination with Chiang does not remedy the lack of a primary reference. Accordingly, we need not reach this ground.

J. Ground 7 – Alleged Obviousness over Chiang (Ex. 1009)

On this record, Petitioner has not established a reasonable likelihood of prevailing on its assertion that the claim would have been obvious over Chiang for the reasons explained below.

1. Chiang (Ex. 1009)

Chiang, US Design Patent No. D720,289 S titled "Power Bank," claims "[t]he ornamental design for a power bank, as shown and described." Ex. 1009, code (57). Chiang's Figures 1, 2, 3, and 6 are reproduced below.

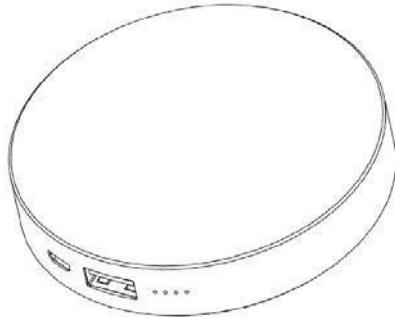


FIG.1

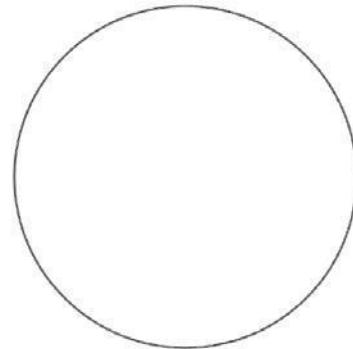


FIG.6

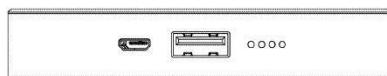


FIG.2

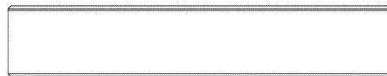
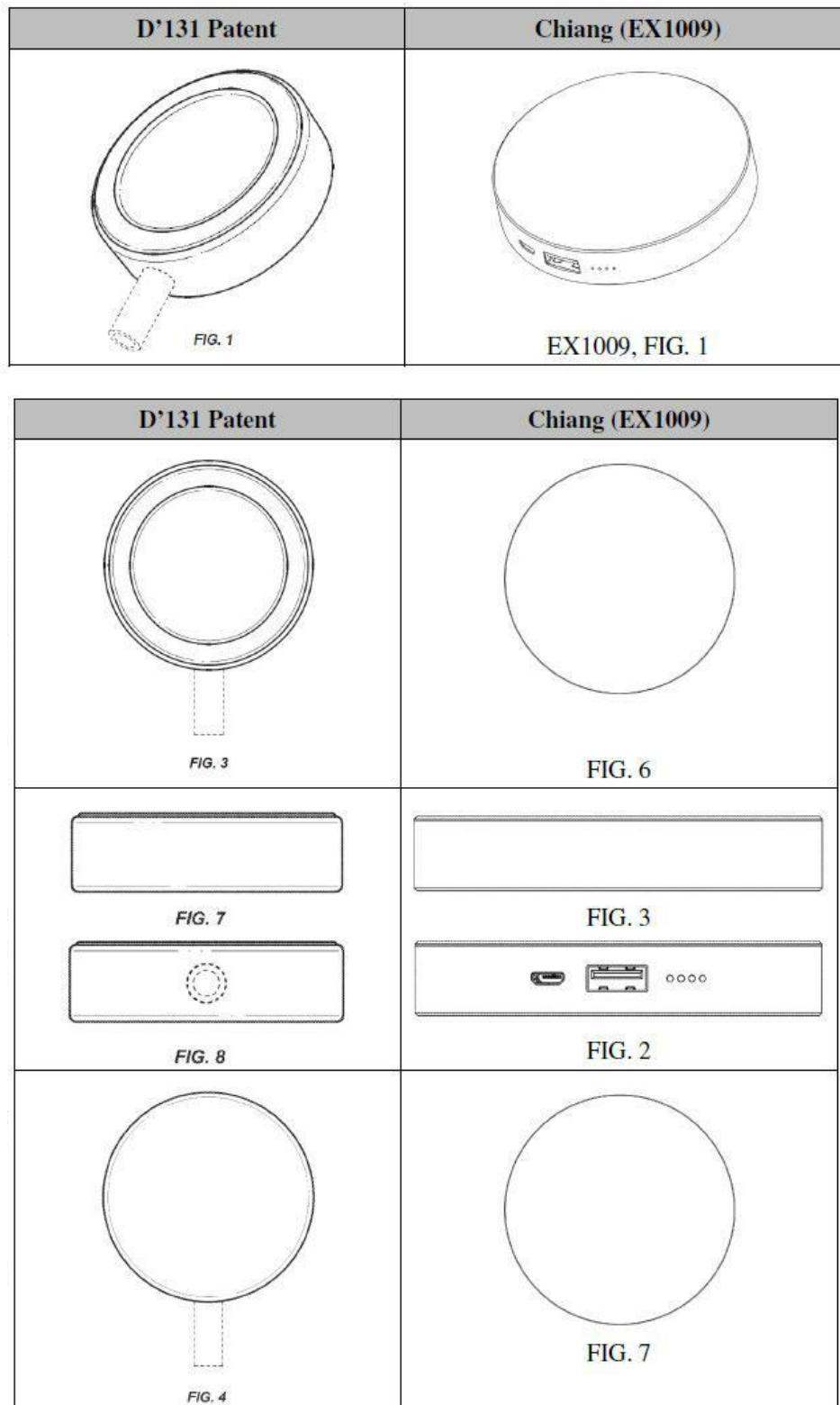


FIG.3

Chiang's Figure 1 illustrates a perspective view of the claimed power bank. Figure 6 illustrates a top plan view of the power bank, and Figures 2 and 3 illustrate front and rear elevation views, respectively, of Chiang's power bank.

2. Petitioner's Arguments

Petitioner provides the following chart(s), reproduced below, showing a comparison of Chiang's power bank with Figures 1, 3–4, 7, and 8 of the claimed design. Pet. 93–94.



Petitioner's chart(s) relating to Ground 7 compare side-by-side Figures 1–4, 7, and 8 of the '131 patent with respective images of Chiang's power bank.

Id.

Petitioner argues that "the chargers of Chiang and the claimed design have a cylindrical shape with a flat bottom surface and smoothed edges that provide the same overall visual impression." Pet. 95. Petitioner contends that "[t]he Chiang cylinder has a slightly larger width-to-height ratio than the claimed design, but that difference, or any difference in the dimensions or proportions of the cylindrical shapes of Chiang and the claimed design, does not alter the overall visual similarity of these designs." *Id.* at 97 (citing Ex. 1001, Figs. 1–4, 7–8; Ex. 1009, Figs. 1–3, 6–7; Ex. 1003 ¶ 134).

Petitioner acknowledges that "Chiang has chamfered edges instead of rounded edges, as shown above . . . [b]ut that slight difference does not alter the overall visual similarity between Chiang and the claimed design." *Id.*

(citing Ex. 1001, Figs. 1–4, 7–8; Ex. 1009, Figs. 1–3, 6–7; Ex. 1003 ¶ 135)."

Petitioner argues that overall, "any differences between Chiang and the claimed design would have been obvious changes to a DOSA." *Id.* at 98.

3. Patent Owner's Arguments¹⁰

Patent Owner argues that Chiang is not a proper primary reference because "Chiang lacks the claimed design's prominent features—the circular *concave* recess that contributes to a nest or cradle appearance and the compact body shape that resembles a compact puck." Prelim. Resp. 80.

¹⁰ Patent Owner also argues that Chiang is non-analogous art compared to the claimed design. *See* Prelim. Resp. 47–48, 81. Because we determine that Chiang is not an appropriate primary reference for determining obviousness, we need not determine whether Chiang is non-analogous art.

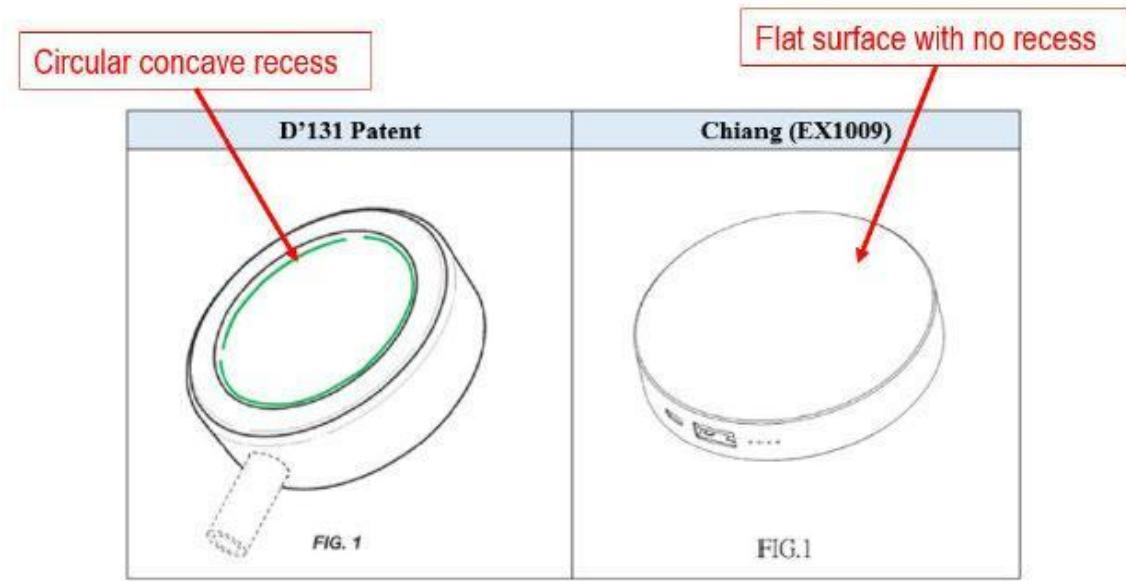
Patent Owner argues further that “Chiang lacks a compact puck shape with proportions that are substantially the same ratio of width to height of the claimed design.” *Id.* at 83 (citing Ex. 2001 ¶¶187–188). According to Patent Owner, “Chiang lacks a sidewall that is continuous, unbroken, and uninterrupted by features that distract from its continuity.” *Id.* at 85 (citing Ex. 2001 ¶ 192). “Instead, Chiang includes cutouts and a series of circular features spaced along the sidewall.” *Id.* (citing Ex. 1009, Fig. 1).

4. Analysis (Ground 7)

For the reasons below, we find that Petitioner has failed to show a reasonable likelihood that the claimed charger of the ’131 patent would have been obvious in view of Chiang.

a) an overall appearance of a compact ice hockey puck shape having a top face with a circular recess that evokes a contemporary appearance. . . [t]he top face is dominated by a prominent circular recess that is inset relative to a flat ring having a distinct proportional width relative to the circular recess.

Although it is not clear that the claimed design reveals a “concave” recess, apart from that, we find persuasive Patent Owner’s annotated comparison, reproduced below.



Petitioner's annotated perspective views compare the front faces of Figure 1 of the '131 patent and Chiang's Figure 1. Importantly, Chiang has no circular recess, nor flat circumferential ring. This is noticeably different from the claimed charger which illustrates a readily identifiable and prominent flat ring and center circular recess. Considering Chiang's unadorned front face, our observations are mostly in accord with Professor Rake's testimony, that a designer of ordinary skill in the art would have understood that “[t]he circular [] recess is a fundamental feature of the claimed design that contributes to its overall appearance in a meaningful way.” Ex. 2001 ¶ 187. Our view is also consistent with Professor Rake that “[a] ring is prominently shown in the figures of the '131 Patent. But Chiang has no ring and therefore lacks an overall appearance that is ‘basically the same’ as the claimed design.” *Id.* ¶ 191.

b) an overall cylindrical shape, with a circular shape that is visible in plan and bottom views . . . [t]he overall cylindrical shape has a distinctive ratio of width (e.g., diameter) to height that, as shown in the figures of the claimed design, evoking the overall appearance of a compact ice hockey puck shape.

Comparing the perspective views from the Petition of the claimed charger, Figure 1, to Chiang's Figures 1 and 2, below, we observe that Chiang's power bank appears proportionally wider in diameter and thinner (less height) when compared to the claimed charger. Pet. 93.

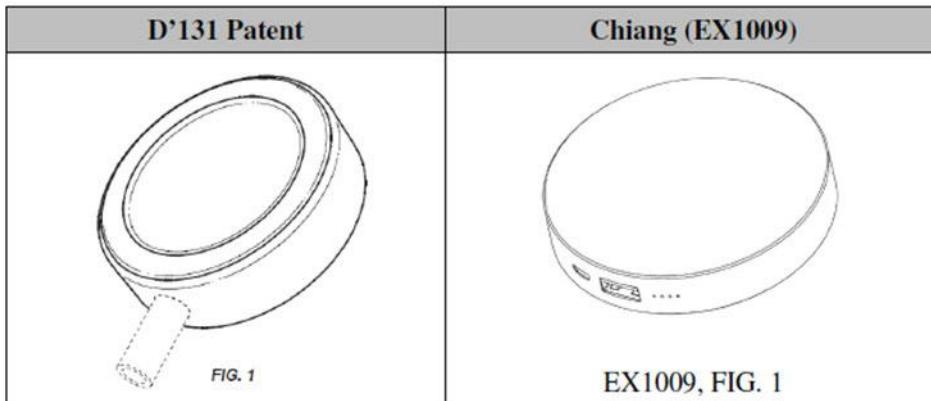
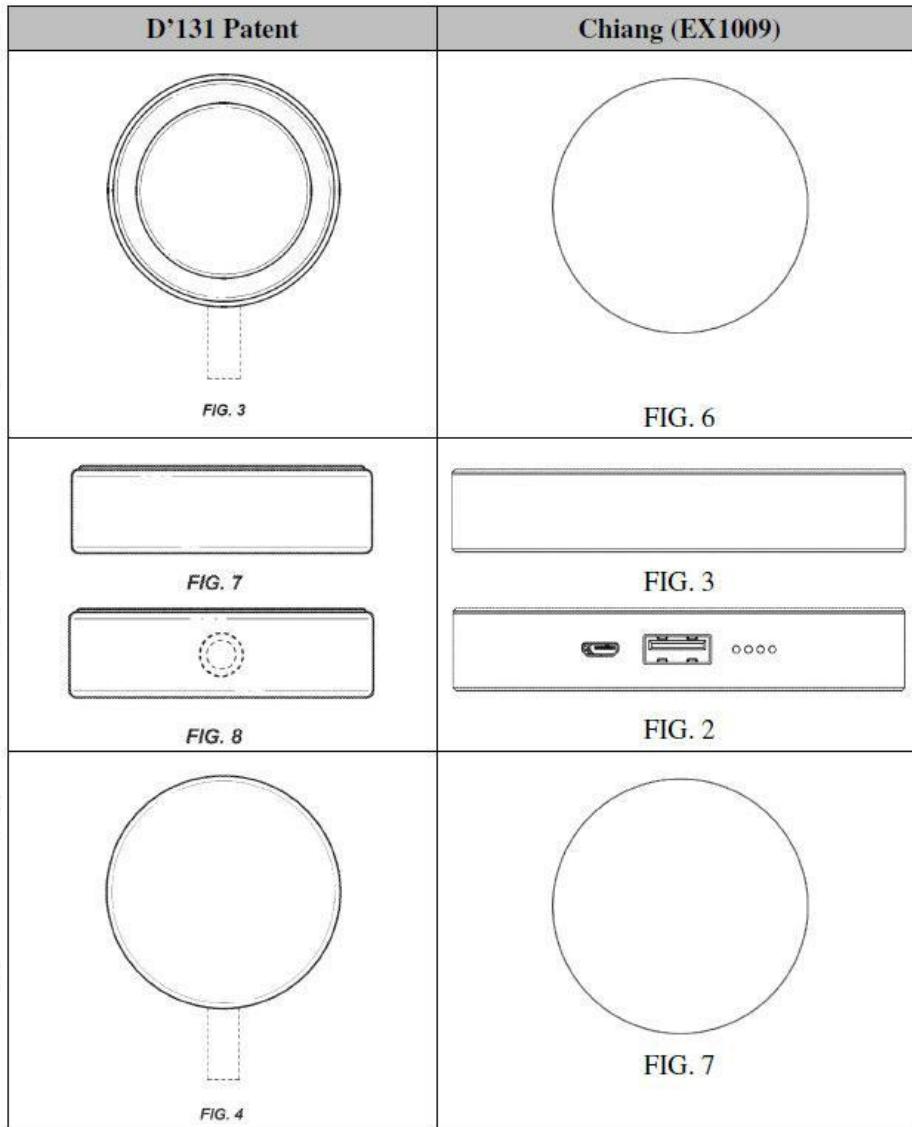


Figure 1 of the '131 patent is shown on the left in comparison with Chiang's Figure 1 on the right depicting the front faces of the claimed design and Chiang's charger. In our view, where the claimed design has a stockier and overall ice hockey puck proportional appearance, Chiang, with its proportions, appears more like table hockey puck proportions, noticeably thinner compared to an ice hockey puck.

We are not persuaded either that Petitioner's chart, reproduced below, properly illustrates the proportional sizes of Chiang's power bank when compared to the claimed design.



Petitioner's chart relating to Ground 7 compares side-by-side Figures 3–4, 7, and 8 of the '131 patent with respective images of Chiang's power bank.

Pet. 94. The reason we draw this conclusion is that Chiang's elevation views of Figures 2 and 3 appear significantly larger than Chiang's front and rear plan views in Figures 6 and 7. So either Figures 6 and 7 have been reproduced too small, or Figures 2 and 3 are too big. In either event, we are not persuaded that Chiang is as proportionally similar to the claimed design as Petitioner espouses. We find more persuasive Professor Rake's testimony

that “Chiang lacks proportions substantially the same ratio of diameter to height, as depicted in the figures of the ’131 Patent. Instead, Chiang’s design has an overall appearance that is substantially wider and flatter.” Ex. 2001 ¶ 189.

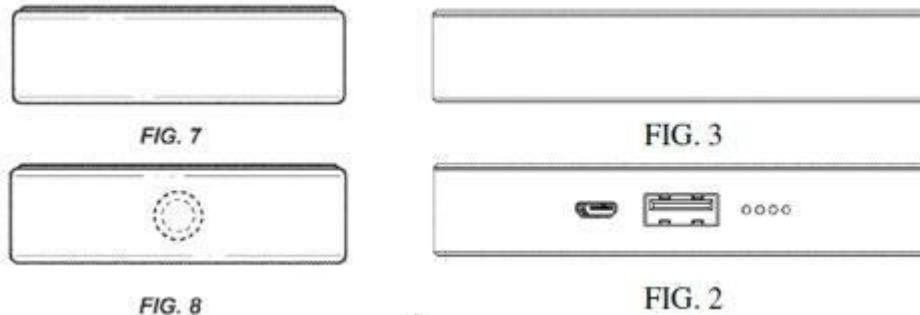
Accordingly, we do not find that these proportional differences are *de minimis* or that Murray would have revealed to a designer of ordinary skill in the art that the relative proportionality of the circular and cylindrical nature of Murray is basically the same as the compact ice hockey puck design of the claimed design.

c) The overall cylindrical shape includes non-orthogonal transitional edges (e.g., beveled or curved edges) between the sidewall and the top and bottom faces which contributes to the charger’s overall compact ice hockey puck appearance.

Both designs are undoubtedly circular, and with respect to the non-orthogonal transitional edges of the top and bottom faces of the claimed charger, Chiang’s Figures 3 and 4, as shown above in comparison to Figures 7 and 8 of the claimed design, illustrate a top and bottom circular edge that appears as a beveled edge between the sidewalls and front and rear faces, not unlike that of the claimed design. Overall, while the beveled edges are arguably similar, because of the proportional width and height difference between the claimed design and Chiang, this similarity does not evoke the same compact ice hockey puck appearance as in the claimed design.

d) The featureless flat bottom surface and sidewall are shown as continuous, unbroken, and uninterrupted by features that distract from the continuity of the design, and also contribute to the charger’s overall compact ice hockey puck appearance.

As discussed above, both designs include a flat bottom surface. And considering the comparison below between Chiang's Figures 2 and 3 with Figures 7 and 8 of the '131 patent, a portion of the sidewall shown in the elevation view of Figure 3 for Chiang's power bank is devoid of indicia, similar to the top elevation view of the claimed design shown in Figure 7.



Chiang's Figures 3 and 4, as shown in comparison to Figures 7 and 8 of the claimed design. Figure 2 of Chiang's power bank includes indicia that appears to be two different types of connector ports, potentially indicative of USB-A and USB-B ports. In addition, Chiang includes 4 circles, perhaps charging status lights, adjacent to the ports. These elements in the sidewall of Chiang are quite different in overall appearance from the claimed charger which has a mostly unadorned sidewall, with the possible exception of the dashed lines indicating a potential electrical cord connector on the claimed charger.

Consistent with our description and view of the sidewalls, Professor Rake testifies that "Chiang lacks a sidewall that is continuous, unbroken, and uninterrupted by features that distract from the continuity of the sidewall's design." Ex. 2001 ¶ 192. Professor Rake opines persuasively that "Chiang includes two cutouts and a series of four circular features, arranged such that the first cutout, the second cutout, and the series of four circular features are each spaced along the sidewall." *Id.*

Overall, we find Professor Rake's testimony compelling because these elements of Chiang differ from the clean, mostly unbroken sidewall of the claimed design.

e) Conclusion as to Ground 7

Considering our claim construction and the overall appearance of the claimed charger illustrated in the '131 patent compared with Chiang, we are persuaded that Chiang is not an appropriate primary reference. While we agree that a designer of ordinary skill in the art would have considered the rear face of the claimed charger and Chiang, as well as the minor effect of the beveled circumferential edges, as similar in appearance, a designer of ordinary skill in the art would consider not just these elements of the designs, but the overall appearance of the designs as a whole. *See Borden*, 90 F.3d at 1574 (The obviousness "inquiry focuses on the visual impression of the claimed design as a whole and not on selected individual features.").

The overall appearance of the claimed design is dictated not only by the top face of the claimed design, but the smooth uninterrupted, and essentially featureless cylinder walls that seamlessly transition to the top face. The top face includes a prominent circular recess surrounded by a flat ring providing a distinctive contemporary appearance visually different from Chiang's blank top face. The overall cylindrical characteristics of the claimed design evoke a stocky ice hockey puck shaped appearance different from Chiang's shorter and wider design. We find that at least the visually apparent differences with respect to the sidewall, top face and overall cylindrical ice hockey puck shaped appearance of the claimed charger outweigh the similarity of the rear face and the circumferential transitions with Chiang. Considering these significant visually apparent differences, we

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are not persuaded that Chiang's power bank is a primary reference "the design characteristics of which are basically the same as the claimed design." *Rosen*, 673 F.2d at 391.

III. CONCLUSION

For the above reasons, we decline to institute *inter partes* review of the challenged claim of the '131 patent.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is denied.

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For PETITIONER:

Douglas B. Wentzel
Brian C. Claassen
Jarom D. Kesler
KNOBBE, MARTENS, OLSON & BEAR, LLP
2dxw@knobbe.com
2bcc@knobbe.com
2jzk@knobbe.com

For PATENT OWNER:

W. Karl Renner
Grace Kim
Giordana Mahn
FISH & RICHARDSON P.C.
axf-ptab@fr.com
gkim@fr.com
gmahn@fr.com